

RELIGIOUS & MORAL WORKS.



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DISCUSSIONS
ON
PHILOSOPHY AND LITERATURE,
EDUCATION AND UNIVERSITY REFORM.

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ON
PHILOSOPHY AND LITERATURE,
EDUCATION AND UNIVERSITY REFORM.

CHIEFLY FROM THE EDINBURGH REVIEW;
CORRECTED, VINDICATED, ENLARGED,
IN NOTES AND APPENDICES.

BY
SIR WILLIAM HAMILTON, BART.

Truth, like a torch, the more it's shook it shines.

SECOND EDITION, ENLARGED.

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M.DCCC.LIII.



*Vidi equidem motas subito flammescere prunas ;
Et sensim, nullo discutiente, mori.*

TO THE FIRST EDITION.

THIS publication will not I hope be deemed superfluous. Its contents have, in great part, been collected and translated in France and Italy; in Germany many of the discussions have been separately translated; and their general collection has once and again been recommended in the leading critical Journals of America. In this country also, a considerable number are comprised in the "Selections from the Edinburgh Review" by Mr Crosse. —M. Peisse, the learned French translator, has added to the articles, published by him under the name of "*Fragments de Philosophie*," sundry important contributions of his own,—an Introduction, an Appendix, and Notes. Of the last especially I have frequently availed myself.

In reprinting these criticisms, I have made a few unimportant corrections; and some not unimportant additions,—in length at least, for the new extends to above a half of the old. At the same time, I was not averse from evincing, by the way, the punctual accuracy of certain statements advanced in them, which had been variously and, sometimes even, vehemently assailed. In one instance, the counter criticism was indeed of such a character and came from such a quarter, that I could not in propriety let it pass without a full and formal refutation. (P. 506—p. 524.)

In preparing an Appendix, supplementary of the previous discussions relative to the English Universities, I insensibly involved myself in a complication of details, which, after a fruitless and wholly unexpected expenditure of time, I found that leisure and strength and patience all failed me either to disentangle or to complete; I was therefore, in the end, constrained to limit the consideration, not only to Oxford exclusively, but exclusively to the education afforded in its fundamental faculty, that of Arts. And in reference even to this, had I anticipated the amount of tedious toil, which the mere collecting and

verifying of the facts would cost, I might have been disposed to avoid what, though to me a real labour, is so disproportioned to any apparent result.

Apart from the Appendices, the new matter, whether of text or notes, except where distinction was needless, is enclosed within square brackets.

EDINBURGH; March 1852.



TO THE SECOND EDITION.

IN preparing this new edition, I have carefully revised the various discussions; and the additions, now introduced, exceed, I find, in matter, a tythe of the former whole. These, in general, are marked by the prefixed date, (1853); but this distinction was not employed, as not found necessary, until toward the middle of the volume. Indeed, throughout, it has been but negligently observed, even in regard to entire notes; while, in the case of interpolations and corrections, it has never been even thought of.—The principal additions will be found under *Philosophy*,—especially in the Philosophical and Logical Appendices; little has been introduced on *Literature*; and, except a few vindicatory or expository notes and some unimportant corrections, the matter of *Education* remains, in the present edition, nearly as in the former.

But since the former edition was published, there has appeared the “Report of Her Majesty’s Commissioners appointed to enquire into the state, discipline, studies, and revenues of the University and Colleges of Oxford,” &c. I regret, that, first from procastination, and then from the circumstances previously mentioned, I was prevented from answering the questions which the Commissioners did me the honour to propose. I am happy, however, to find this opportunity of bearing what testimony I can to the unprejudiced candour and impartiality with which they have conducted their difficult—their

delicate investigations ; and it affords, I think, a hopeful augury of an effectual reform in this great University, that, at last, so many of its modern corruptions have, under public authority and by its own members, been so fairly and fearlessly acknowledged.—But while the spirit, in which the facts of the corruption have been avowed, as well as the general ability of the Report, ought always to command respect ; we may, nay must, at the same time, not unfrequently demur as to the means proposed for their correction. And this, because what is to be here done is comparatively difficult : requiring for a satisfactory determination, besides general intelligence, a peculiar acquaintance with the theory and history of Universities ; a kind of knowledge possessed by few, and which, therefore, without disparagement, need not be presumptively attributed to the Commissioners.—Their recommendation in regard to the all-important point,—*the selection of Professors*, may be chosen as an example. Here the Commissioners, taking no general survey of the ends to be accomplished, and of the means to be adopted for the accomplishment,—far less, of how the problem has been satisfactorily solved in *one*, and only one, way in *all* the Universities distinguished for the uniform celebrity of their Professors : simply propose to leave the patronage of the old chairs untouched, and to vest the patronage of the new in the Crown ; that is, partly to abandon the highest interests of education to the old contingencies, partly to resign them of new to the unchecked chances of ministerial ignorance or indifference, favour or caprice. How superior in this respect is the recommendation of the Scottish Municipal Commissioners ! Indeed, this proposal of the Oxford Report, did it not repress hope, might even excite ridicule. For it actually advises, that the English Universities should, like the English Church, be turned into a field of ministerial patronage ;—that henceforth, as heretofore, an Oxford Professor should be a proficient in

learning, only as an Anglican Dignitary *may be* a learned divine. But it has come to this: For centuries, the advisers of the Crown have not only tolerated in the English Establishment the one example in christendom of a national clergy without a clerical education; but might seem even to have complacently regarded this and other ecclesiastical enormities, as enhancing the value of church patronage, and as leaving its arbitrary dispensation (public and private) more unrestricted. Now at last, however, these evils must speedily, either determine their remedy, or work out their natural results. Of these results, I may refer to one—but not the worst.—In the Scottish Establishment, the professional education and relative trial of the clergy, though never formally dispensed with, has from cognate causes, been suffered to decline from low to lower; so that if, of all national communions, the English Church be the one deformed by the greatest theological ignorance, the Church of Scotland is the one illustrated by the least theological learning. But what has occurred in the one establishment, may, and with far better reason, occur in the other,—a disruption on the ground of the *admission of incompetent pastors*. For our Scottish seceders were right, as to the general fact of such admissions; if wrong,—*rationaly*, in thinking that any incompetency could be corrected by the people,—*theologically and historically*, in thinking that such correction was ever in this (or indeed in any Protestant—in any Christian) Establishment, left to the people's arbitrary veto.—Far, therefore, from keeping down the standard of secular and sacred erudition in the English Universities to the low level of clerical sufficiency in the English Church, it ought to be the zealous endeavour of all well-wishers of Religion and Learning, to work out an effectual reform in Church and University, by elevating in both the standard of competency, and in both securing to merit its legitimate preferment.

LARGO; August 1853.

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PHILOSOPHY.

I.—PHILOSOPHY OF THE UNCONDITIONED.

IN REFERENCE TO COUSIN'S DOCTRINE
OF THE INFINITO-ABSOLUTE.*

(OCTOBER, 1829.)

Cours de Philosophie. Par M. VICTOR COUSIN, Professeur de Philosophie à la Faculté des Lettres de Paris.—*Introduction à l'Histoire de la Philosophie.* 8vo. Paris, 1828.

THE delivery of these Lectures excited an unparalleled sensation in Paris. Condemned to silence during the reign of Jesuit ascendancy, M. Cousin, after eight years of honourable retirement, not

* [Translated into French, by M. Peisse; into Italian, by S. Lo Gatto: also in Crosse's Selections from the Edinburgh Review.

This article did not originate with myself. I was requested to write it by my friend, the late accomplished Editor of the Review, Professor Napier. Personally, I felt averse from the task. I was not unaware, that a discussion of the leading doctrine of the book would prove unintelligible, not only to "the general reader," but, with few exceptions, to our British metaphysicians at large. But, moreover, I was still farther disinclined to the undertaking, because it would behave me to come forward in overt opposition to a certain theory, which, however powerfully advocated, I felt altogether unable to admit; whilst its author, M. Cousin, was a philosopher for whose genius and character I already had the warmest admiration,—an admiration which every succeeding year has only augmented, justified, and confirmed. Nor, in saying this, need I make any reservation. For I admire, even where I dissent; and were M. Cousin's speculations on the Absolute utterly abolished, to him would still remain the honour, of doing more himself, and of assisting more what has been done by others, in the furtherance of an enlightened philosophy, than to any other living individual in France—I might say in Europe. Mr Napier, however, was resolute; it was the first number

exempt from persecution, had again ascended the Chair of Philosophy; and the splendour with which he recommenced his academic career, more than justified the expectation which his recent celebrity as a writer, and the memory of his earlier prelections, had inspired. Two thousand auditors listened, all with admiration, many with enthusiasm, to the eloquent exposition of doctrines intelligible only to the few; and the oral discussion of philosophy awakened in Paris, and in France, an interest unexampled since the days of Abelard. The daily journals found it necessary to gratify, by their earlier summaries, the impatient curiosity of the public; and the lectures themselves, taken in short-hand, and corrected by the Professor, propagated weekly the influence of his instruction to the remotest provinces of the kingdom.

Nor are the pretensions of this doctrine disproportioned to the attention which it has engaged. It professes nothing less than to be the complement and conciliation of all philosophical opinion; and its author claims the glory of placing the key-stone in the arch of science, by the discovery of elements hitherto unobserved among the facts of consciousness.

Before proceeding to consider the claims of M. Cousin to originality, and of his doctrine to truth, it is necessary to say a few words touching the state and relations of philosophy in France.

After the philosophy of Descartes and Malebranche had sunk into oblivion, and from the time that Condillac, exaggerating the too partial principles of Locke, had analysed all knowledge into

of the Review under his direction; and the criticism was hastily written. In this country the reasonings were of course not understood, and naturally, for a season, declared incomprehensible. Abroad, in France, Germany, Italy, and latterly in America, the article has been rated higher than it deserves. The illustrious thinker, against one of whose doctrines its argument is directed, was the first to speak of it in terms which, though I feel their generosity, I am ashamed to quote. I may, however, state, that maintaining always his opinion, M. Cousin, (what is rare, especially in metaphysical discussions,) declared, that it was neither unfairly combated nor imperfectly understood.—In connection with this criticism, the reader should compare what M. Cousin has subsequently stated in defence and illustration of his system, in his Preface to the new edition of the *Introduction à l'Histoire de la Philosophie*, and Appendix to the fifth lecture (*Œuvres*, Serie II. Tome I. pp. vii. ix., and pp. 112-129;)—in his Preface to the second edition, and his Advertisement to the third edition of the *Fragments Philosophiques* (*Œuvres*, S. III. T. iv.)—and in his Prefatory Notice to the *Pensées de Pascal* (*Œuvres*, S. IV. T. i.)—On the other hand, M. Peisse has ably advocated the counter-view, in his Preface and Appendix to the *Fragments de Philosophie*, &c.]

sensation, Sensualism, (or, more correctly, Sensuism,) as a psychological theory of the origin of our cognitions, became, in France, not only the dominant, but almost the one exclusive opinion. It was believed that reality and truth were limited to experience, and experience was limited to the sphere of sense; while the very highest faculties of mind were deemed adequately explained when recalled to perceptions, elaborated, purified, sublimated, and transformed. From the mechanical relations of sense with its object, it was attempted to solve the mysteries of will and intelligence; the philosophy of mind was soon viewed as correlative to the physiology of organisation. The moral nature of man was at last formally abolished, in its identification with his physical: mind became a reflex of matter; thought a secretion of the brain.

A doctrine so melancholy in its consequences, and founded on principles thus partial and exaggerated, could not be permanent: a reaction was inevitable. The recoil, which began about twenty years ago, has been gradually increasing; and now, it is perhaps even to be apprehended that its intensity may become excessive. As the poison was of foreign growth, so also has been the antidote. The doctrine of Condillac was, if not a corruption, a development, of the doctrine of Locke; and, in returning to a better philosophy, the French are still obeying an impulsion communicated from without. This impulsion may be traced to two different sources,—to the philosophy of Scotland, and to the philosophy of Germany.

In Scotland, a philosophy had sprung up, which, though professing, equally with the doctrine of Condillac, to build only on experience, did not, like that doctrine, limit experience to the relations of sense and its objects. Without vindicating to man more than a relative knowledge of existence, and restricting the science of mind to an observation of the fact of consciousness, it, however, analysed that fact into a greater number of more important elements than had been recognised in the school of Condillac. It showed, that phenomena were revealed in thought which could not be resolved into any modification of sense,—external or internal. It proved, that intelligence supposed principles, which, as the *conditions* of its activity, cannot be the *results* of its operation; that the mind contained knowleges, which, as primitive, universal, necessary, are not to be explained as generalizations from the contingent and individual, about which alone all experience is conversant. The phenomena of mind were thus distinguished from the phenomena of matter; and if the impossibility

of materialism were not demonstrated, there was, at least, demonstrated the impossibility of its proof.

This philosophy, and still more the spirit of this philosophy, was calculated to exert a salutary influence on the French. And such an influence it did exert. For a time, indeed, the truth operated in silence; and Reid and Stewart had already modified the philosophy of France, before the French were content to acknowledge themselves their disciples. In the works of Dege-rando and Laromiguière, may be traced the influence of Scottish speculation; but it is to Royer-Collard, and, more recently, to Jouffroy, that our countrymen are indebted for a full acknowledgment of their merits, and for the high and increasing estimation in which their doctrines are now held in France. M. Royer-Collard, whose authority has, in every relation, been exerted only for the benefit of his country, and who, once great as a professor, is now not less illustrious as a statesman, in his lectures, advocated with distinguished ability the principles of the Scottish school; modestly content to follow, while no one was more entitled to lead. M. Jouffroy, by his recent translation of the works of Reid, and by the excellent preface to his version of Dugald Stewart's "Outlines of Moral Philosophy," has likewise powerfully co-operated to the establishment, in France, of a philosophy equally opposed to the exclusive Sensualism of Condillac, and to the exclusive Rationalism of the new German School.

Germany may be regarded, latterly at least, as the metaphysical antipodes of France. The comprehensive and original genius of Leibnitz, itself the ideal abstract of the Teutonic character, had reacted powerfully on the minds of his countrymen; and *Rationalism*, (more properly *Intellectualism*,*) has, from his time, always remained the favourite philosophy of the Germans. On the prin-

* [On the modern commutation of *Intellect* or *Intelligence* (*Nous*, *Mens*, *Intellectus*, *Verstand*), and *Reason* (*Νέγος*, *Ratio*, *Vernunft*), see Dissertations on Reid, pp. 668, 669, 693. (This has nothing to do with the confusion of *Reason* and *Reasoning*.) Protesting, therefore, against the abuse, I historically employ the terms as they were employed by the philosophers here commemorated. This unfortunate reversal has been propagated to the French philosophy, and also adopted in England by Coleridge and his followers.—I may here notice that I use the term *Understanding*, not for the *noetic* faculty, intellect proper, or place of principles, but for the *dianoetic* or discursive faculty, in its widest signification, for the faculty of relations or comparison; and thus in the meaning in which *Verstand* is now employed by the Germans. In this sense I have been able to be uniformly consistent.]

ciple of this doctrine, it is in Reason alone that truth and reality are to be found. Experience affords only the occasions on which intelligence reveals to us the necessary and universal notions of which it is the complement; and these notions constitute at once the foundation of all reasoning, and the guarantee of our whole knowledge of reality. Kant, indeed, pronounced the philosophy of Rationalism to be a mere fabric of delusion. He declared, that a science of existence was beyond the compass of our faculties; that pure reason, as purely subjective,* and conscious of nothing but

* In the philosophy of mind, *subjective* denotes what is to be referred to the thinking subject, the Ego; *objective* what belongs to the object of thought, the Non-Ego.—It may be safe, perhaps, to say a few words in vindication of our employment of these terms. By the Greeks the word *ὑποκείμενον* was equivocally employed to express either the *object of knowledge*, (the *materia circa quam*,) or the *subject of existence*, (the *materia in qua*.) The exact distinction of *subject* and *object* was first made by the schoolmen; and to the schoolmen the vulgar languages are principally indebted for what precision and analytic subtilty they possess. These correlative terms correspond to the first and most important distinction in philosophy; they embody the original antithesis in consciousness of self and not-self,—a distinction which, in fact, involves the whole science of mind; for psychology is nothing more than a determination of the Subjective and the Objective, in themselves, and in their reciprocal relations. Thus significant of the primary and most extensive analysis in philosophy, these terms, in their substantive and adjective forms, passed from the schools into the scientific language of Telesius, Campanella, Berigardus, Gassendi, Descartes, Spinoza, Leibnitz, Wolf, &c. Deprived of these terms, the Critical philosophy, indeed the whole philosophy of Germany, would be a blank. In this country, though familiarly employed in scientific language, even subsequently to the time of Locke, the adjective forms seem at length to have dropt out of the English tongue. That these words waxed obsolete was perhaps caused by the ambiguity which had gradually crept into the signification of the substantives. *Object*, besides its proper signification, came to be abusively applied to denote *motive*, *end*, *final cause*,—a meaning not recognised by Johnson. This innovation was probably borrowed from the French, in whose language the word had been similarly corrupted after the commencement of the last century (Dict. de Trevoux, voce *Objet*.) *Subject* in English, as *sujet* in French, had been also perverted into a synonyme for *object*, taken in its proper meaning, and had thus returned to the original ambiguity of the corresponding term in Greek. It is probable that the logical application of the word (*subject of attribution or predication*) facilitated or occasioned this confusion. In using the terms, therefore, we think that an explanation, but no apology, is required. The distinction is of paramount importance, and of infinite application, not only in philosophy proper, but in grammar, rhetoric, criticism, ethics, politics, jurisprudence, theology. It is adequately expressed

itself, was therefore unable to evince the reality of aught beyond the phenomena of its personal modifications. But scarcely had the critical philosopher accomplished the recognition of this important principle, the result of which was, to circumscribe the field of speculation by narrow bounds; than from the very disciples of his school there arose philosophers, who, despising the contracted limits, and humble results, of a philosophy of observation, re-established, as the predominant opinion, a bolder and more uncompromising Rationalism than any that had ever previously obtained for their countrymen the character of philosophic visionaries;—

“Gens ratione ferox, et mentem pasta chinæris.” *
 (“Minds fierce from reason, and on faneels fed.”)

Founded by Fichte, but evolved by Schelling, this doctrine regards experience as unworthy of the name of *science*: because, as only of the phenomenal, the transitory, the dependent, it is only of that which, having no reality in itself, cannot be established as a valid basis of certainty and knowledge. Philosophy must, therefore, either be abandoned, or we must be able to seize the One, the Absolute, the Unconditioned, immediately and in

by no other terms; and if these did not already enjoy a prescriptive right, as denizens of the language, it cannot be denied, that, as strictly analogical, they would be well entitled to sue out their naturalization.—[Not that these terms were formerly always employed in the same signification and contrast which they now obtain. For a history of these variations, see Dissertations on Reid, p. 806, sq.—Since this article was written, the words have in this country re-entered on their ancient rights; they are now in common use.]

* [This line, which was quoted from memory, has, I find, in the original, “furens;” therefore translated—“Minds mad with reasoning—and faneys-fed.” The author certainly had in his eye the “ratione insanias” of Terence. It is from a satire by Abraham Remi, who, in the former half of the seventeenth century, was Professor Royal of Eloquence in the University of Paris; and it referred to the disputants of the Irish College in that illustrious school. The “Hibernian Logicians” were, indeed, long famed over the continent of Europe, for their acuteness, pugnacity, and barbarism; as is recorded by Patin, Bayle, Le Sage, and many others. The learned Menage was so delighted with the verse, as to declare, that he would give his best benefice (and he enjoyed some fat ones) to have written it. It applies, not only with real, but with verbal, accuracy to the German *Rationalists*; who in Philosophy (as Aristotle has it), “in making reason omnipotent, show their own impotence of reason,” and in Theology (as Charles II. said of Isaac Vossius),—“believe every thing but the Bible.”]

itself. And this they profess to do by a kind of *intellectual vision*.* In this act, reason, soaring not only above the world of sense, but beyond the sphere of personal consciousness, boldly places itself at the very centre of absolute being, with which it claims to be, in fact, identified; and thence surveying existence in itself, and in its relations, unveils to us the nature of the Deity, and explains, from first to last, the derivation of all created things.

M. Cousin is the Apostle of Rationalism in France; and we are willing to admit that the doctrine could not have obtained a more eloquent or devoted advocate. For philosophy he has suffered; to her ministry he has consecrated himself—devoted without reserve his life and labours. Neither has he approached the sanctuary with unwashed hands. The editor of Proclus and Descartes, the translator and interpreter of Plato, and the promised expositor of Kant, will not be accused of partiality in the choice of his pursuits; while his two works, under the title of *Philosophical Fragments*, bear ample evidence to the learning, elegance, and distinguished ability of their author. Taking him all in all, in France M. Cousin stands alone: nor can we contemplate his character and accomplishments, without the sincerest admiration, even while we dissent from the most prominent principle of his philosophy. The development of his system, in all its points, betrays the influence of German speculation on his opinions. His theory is not, however, a scheme of exclusive Rationalism; on the contrary, the peculiarity of his doctrine consists in the attempt to combine the philosophy of Experience, and the philosophy of Reason, into one.—The following is a concise statement of the fundamental positions of his system:

Reason, or intelligence, has three integrant elements, affording three regulative principles, which at once constitute its nature, and govern its manifestations. These *three Ideas* severally suppose each other, and, as inseparable, are equally essential and

* [*Intellectuelle Anschauung*.—This is doubly wrong.—1°, In grammatical rigour, the word in German ought to have been “*intellektuelle*.” 2°, In philosophical consistency the intuition ought not to have been called by its authors (Fichte and Schelling) *intellectual*. For, though this be, in fact, absolutely more correct, yet relatively it is a blunder; for the Intuition, as intended by them, is of their higher faculty, the Reason (*Vernunft*), and not of their lower, the Understanding or Intellect (*Verstand*). In modern German Philosophy, *Verstand* is always translated by *Intellectus*; and this again corresponds to *Nous*.]

equally primitive. They are recognised by Aristotle and by Kant, in their several attempts to analyse intelligence into its principles; but though the Categories of both philosophers comprise all the elements of thought, in neither list are these elements naturally co-arranged, or reduced to an ultimate simplicity.

The *first* of these Ideas, elements, or laws, though fundamentally one, our author variously expresses, by the terms *unity, identity, substance, absolute cause, the infinite, pure thought, &c.*; (we would briefly call it the *Unconditioned*.)—The *second*, he denominates *plurality, difference, phenomenon, relative cause, the finite, determined thought, &c.*; (we would style it the *Conditioned*.)—These two elements are relative and correlative. The first, though absolute, is not conceived as existing absolutely in itself; it is conceived as an absolute cause, as a cause which cannot but pass into operation; in other words, the first element must manifest itself in the second. The first two Ideas are thus connected together as cause and effect; each is only realised through the other; and this *their connection, or correlation*, is the *third* integrant element of intelligence.

Reason, or intelligence, in which these Ideas appear, and which, in fact, they make up, is not individual, is not ours, is not even human; it is absolute, it is divine. What is personal to us, is our free and voluntary activity; what is not free and not voluntary, is adventitious to man, and does not constitute an integrant part of his individuality. Intelligence is conversant with truth; truth, as necessary and universal, is not the creature of my volition; and reason, which, as the subject of truth, is also universal and necessary, is consequently impersonal. We see, therefore, by a light which is not ours, and reason is a revelation of God in man. The Ideas of which we are conscious, belong not to us, but to absolute intelligence. They constitute, in truth, the very mode and manner of its existence. For consciousness is only possible under plurality and difference, and intelligence is only possible through consciousness.

The divine nature is essentially comprehensible. For the three Ideas constitute the nature of the Deity; and the very nature of ideas is to be conceived. God, in fact, exists to us, only in so far as he is known; and the degree of our knowledge must always determine the measure of our faith. The relation of God to the universe is therefore manifest, and the creation easily understood. To create, is not to make something out of nothing,

for this is contradictory, but to originate from self. We create so often as we exert our free causality, and something is created by us, when something begins to be by virtue of the free causality which belongs to us. To create is, therefore, to cause, not with nothing, but with the very essence of our being,—with our force, our will, our personality. The divine creation is of the same character. God, as he is a cause, is able to create; as he is an absolute cause, he cannot but create. In creating the universe, he does not draw it from nothing; he draws it from himself. The creation of the universe is thus necessary; it is a manifestation of the Deity, but not the Deity absolutely in himself; it is God passing into activity, but not exhausted in the act.

The universe created, the principles which determined the creation are found still to govern the worlds of matter and mind.

Two Ideas and their Connection explain the intelligence of God; two laws in their counterpoise and correlation explain the material universe. The law of *Expansion* is the movement of unity to variety; the law of *Attraction* is the return of variety to unity.

In the world of mind the same analogy is apparent. The study of consciousness is psychology. Man is the microcosm of existence; consciousness, within a narrow focus, concentrates a knowledge of the universe and of God; psychology is thus the abstract of all science, human and divine. As in the external world, all phenomena may be reduced to the two great laws of Action and Reaction; so, in the internal, all the facts of consciousness may be reduced to one fundamental fact, comprising in like manner two principles and their correlation; and these principles are again the *One* or the *Infinite*,—the *Many* or the *Finite*,—and the *Connection of the infinite and finite*.

In every act of consciousness we distinguish a *Self* or *Ego*, and something different from self, a *Non-ego*; each limited and modified by the other. These, together, constitute the finite element. But at the same instant when we are conscious of these existences, plural, relative, and contingent, we are conscious likewise of a superior unity in which they are contained, and by which they are explained;—a unity absolute as they are conditioned, substantive as they are phenomenal, and an infinite cause as they are finite causes. This unity is God. The fact of consciousness is thus a complex phenomenon, comprehending three several terms: 1°, The idea of the Ego and Non-ego as Finite; 2°, The idea of something else as Infinite; and, 3°, The idea of the Rela-

tion of the finite element to the infinite. These elements are revealed in themselves and in their mutual connexion, in every act of primitive or Spontaneous consciousness. They can also be reviewed by Reflection in a voluntary act; but here reflection distinguishes, it does not create. The three Ideas, the three Categories of intelligence, are given in the original act of instinctive apperception, obscurely, indeed, and without contrast. Reflection analyses and discriminates the elements of this primary synthesis; and as Will is the condition of reflection, and will at the same time is personal, the Categories, as obtained through Reflection, have consequently the appearance of being also personal and subjective. It was this personality of Reflection that misled Kant: caused him to overlook or misinterpret the fact of spontaneous consciousness; to individualise intelligence; and to collect under this personal reason all that is conceived by us as necessary and universal. But as, in the spontaneous intuition of reason, there is nothing voluntary, and consequently nothing personal; and as the truths which intelligence here discovers, come not from ourselves; we are entitled, up to a certain point, to impose these truths on others as revelations from on high: while, on the contrary, reflection being wholly personal, it would be absurd to impose on others, what is the fruit of our individual operations. Spontaneity is the principle of religion; Reflection of philosophy. Men agree in spontaneity; they differ in reflection. The former is necessarily veracious; the latter is naturally delusive.

The condition of Reflection is separation: it illustrates by distinguishing; it considers the different elements apart, and while it contemplates one, it necessarily throws the others out of view. Hence, not only the possibility, but the necessity, of error. The primitive unity, supposing no distinction, admits of no error; reflection in discriminating the elements of thought, and in considering one to the exclusion of others, occasions error, and a variety in error. He who exclusively contemplates the element of the Infinite, despises him who is occupied with the idea of the Finite; and *vice versa*. It is the wayward development of the various elements of intelligence, which determines the imperfections and varieties of individual character. Men under this partial and exclusive development, are but fragments of that humanity which can only be fully realised in the harmonious evolution of all its principles. What Reflection is to the individual, History

is to the human race. The difference of an epoch consists exclusively in the partial development of some one element of intelligence in a prominent portion of mankind; and as there are only three such elements, so there are only three grand epochs in the history of man.

A knowledge of the *elements of reason*, of their relations and of their laws, constitutes not merely Philosophy, but is the condition of a History of Philosophy. The history of human reason, or the history of philosophy, must be rational and philosophic. It must be philosophy itself, with all its elements, in all their relations, and under all their laws, represented in striking characters by the hands of time and of history, in the manifested progress of the human mind. The discovery and enumeration of all the elements of intelligence enable us to survey the progress of speculation from the loftiest vantage ground; it reveals to us the laws by which the development of reflection or philosophy is determined; and it supplies us with a canon by which the approximation of the different systems to the truth may be finally ascertained. And what are the results? *Sensualism, Idealism, Scepticism, Mysticism*, are all partial and exclusive views of the elements of intelligence. But each is false only as it is incomplete. They are all true in what they affirm; all erroneous in what they deny. Though hitherto opposed, they are, consequently, not incapable of coalition; and, in fact, can only obtain their consummation in a powerful *Eclecticism*,—a system which shall comprehend them all. This Eclecticism is realised in the doctrine previously developed; and the possibility of such a catholic, such a perennial, philosophy was first afforded by the discovery of M. Cousin, made so long ago as the year 1817,—“that consciousness contained many more phenomena than had previously been suspected.”—Such is a summary of M. Cousin's system.

The present course is at once an exposition of these principles, as a true theory of philosophy, and an illustration of the mode in which this theory is to be applied, as a rule of criticism in the history of philosophical opinion. As the justice of the application must be always subordinate to the truth of the principle, we shall confine ourselves exclusively to a consideration of M. Cousin's system, viewed absolutely in itself. This, indeed, we are afraid will prove comparatively irksome; and, therefore, solicit indulgence, not only for the unpopular nature of the discussion, but for the employment of language which, from the total neglect of

these speculations in Britain, will necessarily appear abstruse—not merely to the general reader.

Now, it is manifest that the whole doctrine of M. Cousin is involved in the proposition,—*that the Unconditioned, the Absolute, the Infinite, is immediately known in consciousness, and this by difference, plurality, and relation.* The unconditioned, as an original element of knowledge, is the generative principle of his system, but common to him with others; whereas the mode in which the possibility of this knowledge is explained, affords its discriminating peculiarity. The other positions of his theory, as deduced from this assumption, may indeed be disputed, even if the antecedent be allowed; but this assumption disproved, every consequent in his theory is therewith annihilated. The recognition of the Absolute as a constitutive principle of intelligence, our author regards as at once the condition and the end of philosophy; and it is on the discovery of this principle in the fact of consciousness, that he vindicates to himself the glory of being the founder of the new *eclectic*, or the one catholic, philosophy. The determination of this cardinal point will thus briefly satisfy us touching the claim and character of the system. To explain the nature of the problem itself, and the sufficiency of the solution propounded by M. Cousin, it is necessary to premise a statement of the opinions which may be entertained regarding the Unconditioned, (Absolute and Infinite), as an immediate object of knowledge and of thought.

These opinions may be reduced to *four*.—1°, The Unconditioned is incognisable and inconceivable; its notion being only negative of the Conditioned, which last can alone be positively known or conceived.—2°, It is not an object of knowledge; but its notion, as a regulative principle of the mind itself, is more than a mere negation of the Conditioned.—3°, It is cognisable, but not conceivable; it can be known by a sinking back into identity with the Infinite-Absolute, but it is incomprehensible by consciousness and reflection, which are only of the relative and the different.—4°, It is cognisable and conceivable by consciousness and reflection, under relation, difference, and plurality.

The first of these opinions we regard as true; the second is held by Kant; the third by Schelling; * and the last by our author.

* [But not alone by Schelling. For of previous philosophers, several held substantially the same doctrine. Thus Plotinus:—*Ἐστὶ δὲ τὸ ὅλον*

1. In our opinion, the mind can conceive, and consequently can know, only the *limited*, and the *conditionally limited*. The unconditionally unlimited, or the *Infinite*, the unconditionally limited, or the *Absolute*, cannot positively be construed to the mind; they can be conceived, only by a thinking away from, or abstraction of, those very conditions under which thought itself is realised; consequently, the notion of the Unconditioned is only *negative*,—negative of the conceivable itself. For example: On the one hand we can positively conceive, neither an absolute whole, that is, a whole so great, that we cannot also conceive it as a relative part of a still greater whole; nor an absolute part, that is, a part so small that we cannot also conceive it as a relative whole, divisible into smaller parts. On the other hand, we cannot positively represent, or realise, or construe to the mind (as *hero Understanding and Imagination coincide**), an infinite whole, for this could only be done by the infinite synthesis in thought of finite wholes, which would itself require an infinite time for its accomplishment; nor, for the same reason, can we follow out in thought an infinite divisibility of parts. The result is the same, whether we apply the process to limitation in *space*, in *time*, or in *degree*. The unconditional negation, and the unconditional affirmation of limitation; in other words, the *Infinite* and the *Absolute*, *properly so called*,† are thus equally inconceivable to us.

ἐνέργεια· μάλλον δὲ τὰ ἀμφω ἔν. Μία μὲν οὖν φύσις, τὸ τί ἦν, ὃ τι τοῦτ' ἐστὶ καὶ τὰ ὄντα. Καὶ ἡ τοῦ ὄντος ἐνέργεια καὶ ὁ νοῦς ὁ τοιοῦτος· καὶ αἱ οὕτω νοήσεις, τὸ εἶδος, καὶ ἡ μορφή τοῦ ὄντος, καὶ ἡ ἐνέργεια κ. τ. λ. (Eun. V. l. ix. c. 8.)]

* [The Understanding, thought proper, notion, concept, &c., may coincide or not with Imagination, representation proper, image, &c. The two faculties do not coincide in a general notion; for we cannot represent Man or Horse in an actual image without individualising the universal; and thus contradiction emerges. But in the individual, say, Socrates or Bocephalus, they do coincide; for I see no valid ground why we should not *think*, in the strict sense of the word, or *conceive* the individuals which we *represent*. In like manner there is no mutual contradiction between the *image* and the *concept* of the Infinite or Absolute, if these be otherwise possible; for there is not necessarily involved the incompatibility of the one act of cognition with the other.]

† It is right to observe, that though we are of opinion that the terms, *Infinite* and *Absolute*, and *Unconditioned*, ought not to be confounded, and accurately distinguish them in the statement of our own view; yet, in speaking of the doctrines of those by whom they are indifferently employed, we have not thought it necessary, or rather we have found it impossible, to

As the conditionally limited (which we may briefly call the *Conditioned*) is thus the only possible object of knowledge and of positive thought,—thought necessarily supposes condition. *To think is to condition*; and conditional limitation is the fundamental law of the possibility of thought. For, as the greyhound cannot outstrip his shadow, nor (by a more appropriate simile) the eagle outsoar the atmosphere in which he floats, and by which alone he is supported; so the mind cannot transcend that sphere of limitation, within and through which exclusively the possibility of thought is realised. Thought is only of the conditioned; because, as we have said, to think is simply to condition. The *Absolute* is conceived merely by a negation of conceivability; and all that we know, is only known as

—— “won from the void and formless *Infinite*.”

How, indeed, it could ever be doubted that thought is only of the Conditioned, may well be deemed a matter of the profoundest admiration. Thought cannot transcend consciousness; consciousness is only possible under the antithesis of a subject and object of thought, known only in correlation, and mutually limiting each other; while, independently of this, all that we know either of subject or object, either of mind or matter, is only a knowledge in each of the particular, of the plural, of the different, of the modified, of the phænomenal. We admit that the consequence of

adhere to the distinction. The Unconditioned in our use of language denotes the genus of which the Infinite and Absolute are the species.

[The term Absolute is of a twofold (if not threefold) ambiguity, corresponding to the double (or treble) signification of the word in Latin.

1. *Absolutum* means what is *freed or loosed*; in which sense the Absolute will be what is aloof from relation, comparison, limitation, condition, dependence, &c., and thus is tantamount to τὸ ἀπόλυτον of the lower Greeks. In this meaning the Absolute is not opposed to the Infinite.

2. *Absolutum* means *finished, perfected, completed*; in which sense the Absolute will be what is out of relation, &c., as finished, perfect, complete, total, and thus corresponds to τὸ ὅλον and τὸ τέλειον of Aristotle. In this acceptation,—and it is that in which for myself I exclusively use it,—the Absolute is diametrically opposed to, is contradictory of, the Infinite.

Besides these two meanings, there is to be noticed the use of the word, for the most part in its adverbial form;—*absolutely* (*absolutè*) in the sense of *simply, simpliciter, ἀπλῶς*, that is, considered in and for itself—considered not in relation. This holds a similar analogy to the two former meanings of Absolute, which the Indefinite (τὸ ἀόριστον) does to the Infinite (τὸ ἀπειρον). It is subjective as they are objective; it is in our thought as they are in their own existence. This application is to be discounted, as here irrelevant.]

this doctrine is,—that philosophy, if viewed as more than a science of the Conditioned, is impossible. Departing from the particular, we admit, that we can never, in our highest generalisations, rise above the Finite; that our knowledge, whether of mind or matter, can be nothing more than a knowledge of the relative manifestations of an existence, which in itself it is our highest wisdom to recognise as beyond the reach of philosophy. This is what in the language of St Austin,—“*Cognoscendo ignoratur, et ignorando cognoscitur.*”

The Conditioned is the mean between two extremes,—two conditionates, exclusive of each other, *neither of which can be conceived as possible*, but of which, on the principles of contradiction and excluded middle, *one must be admitted as necessary*. On this opinion, therefore, our faculties are shown to be weak, but not deceitful. The mind is not represented as conceiving two propositions subversive of each other, as equally possible; but only, as unable to understand as possible, either of two extremes; one of which, however, on the ground of their mutual repugnance, it is compelled to recognise as true. We are thus taught the salutary lesson, that the capacity of thought is not to be constituted into the measure of existence; and are warned from recognising the domain of our knowledge as necessarily co-extensive with the horizon of our faith. And by a wonderful revelation, we are thus, in the very consciousness of our inability to conceive aught above the relative and finite, inspired with a belief in the existence of something unconditioned beyond the sphere of all reprehensible reality.*

2. The second opinion, that of KANT, is fundamentally the same as the preceding. Metaphysic, strictly so denominated, the philosophy of Existence, is virtually the doctrine of the Unconditioned. From Xenophanes to Leibnitz, the Infinite, the Absolute, the Unconditioned, formed the highest principle of speculation; but from

* [True, therefore, are the declarations of a pious philosophy :—“A God understood would be no God at all;”—“To think that God is, as we can think him to be, is blasphemy.”—The Divinity, in a certain sense, is revealed; in a certain sense is concealed: He is at once known and unknown. But the last and highest consecration of all true religion, must be an altar—*Ἀγνίστη Θεῷ*—“*To the unknown and unknowable God.*” In this consummation, nature and revelation, paganism and christianity, are at one: and from either source the testimonies are so numerous that I must refrain from quoting any.—Am I wrong in thinking, that M. Cousin would not repudiate this doctrine?]

the dawn of philosophy in the school of Elea until the rise of the Kantian philosophy, no serious attempt was made to investigate the nature and origin of this notion (or notions) as a psychological phenomenon. Before Kant, philosophy was rather a deduction from principles, than an inquiry concerning principles themselves. At the head of every system a cognition figured, which the philosopher assumed in conformity to his views; but it was rarely considered necessary, and more rarely attempted, to ascertain the genesis, and determine the domain, of this notion or judgment, previous to application. In his first *Critique*, Kant undertakes a regular survey of consciousness. He professes to analyse the conditions of human knowledge,—to mete out its limits,—to indicate its point of departure,—and to determine its possibility. That Kant accomplished much, it would be prejudice to deny; nor is his service to philosophy the less, that his success has been more decided in the subversion of error than in the establishment of truth. The result of his examination was the abolition of the metaphysical sciences,—of Rational Psychology, Ontology, Speculative Theology, &c., as founded on mere *petitiones principiorum*. Existence is revealed to us only under specific modifications; and these are known only under the conditions of our faculties of knowledge. “Things in themselves,” Matter, Mind, God,—all, in short, that is not finite, relative, and phenomenal, as bearing no analogy to our faculties, is beyond the verge of our knowledge. Philosophy was thus restricted to the observation and analysis of the phenomena of consciousness; and what is not explicitly or implicitly given in a fact of consciousness, is condemned, as transcending the sphere of a legitimate speculation. A knowledge of the Unconditioned is declared impossible; either immediately, as an intuition, or mediately, as an inference. A demonstration of the Absolute from the Relative is logically absurd; as in such a syllogism we must collect in the conclusion what is not distributed in the premises: And an immediate knowledge of the Unconditioned is equally impossible.—But here we think Kant’s reasoning complicated, and his reduction incomplete. We must explain ourselves.

While we regard as conclusive, Kant’s analysis of Time and Space into formal necessities of thought, (without however admitting, that they have no external or objective reality;) we cannot help viewing his deduction of the “Categories of Understanding,” and of the “Ideas of speculative Reason,” as the work of a great

but perverse ingenuity. The Categories of Understanding are merely subordinate forms of the Conditioned. Why not, therefore, generalise the *Conditioned—Existence conditioned*, as the supreme category, or categories, of thought?—and if it were necessary to analyse this form into its subaltern applications, why not develop these immediately out of the generic principle, instead of preposterously, and by a forced and partial analogy, deducing the laws of the understanding from a questionable division of logical propositions? Why distinguish Reason (*Vernunft*) from Understanding (*Verstand*), simply on the ground that the former is conversant about, or rather tends towards, the Unconditioned; when it is sufficiently apparent, that the Unconditioned is conceived only as the negation of the Conditioned, and also that the conception of contradictories is one? In the Kantian philosophy both faculties perform the same function, both seek the one in the many;—the Idea (*Idee*) is only the Concept (*Begriff*) sublimated into the inconceivable; Reason only the Understanding which has “overleaped itself.” Kant has clearly shown, that the Idea of the Unconditioned can have no objective reality,—that it conveys no knowledge,—and that it involves the most insoluble contradictions. But he ought to have shown, that the Unconditioned had no objective application, because it had, in fact, no subjective affirmation; that it afforded no real knowledge, because it contained nothing even conceivable; and that it is self-contradictory, because it is not a notion, either simple or positive, but only a fasciculus of negations—negations of the Conditioned in its opposite extremes, and bound together merely by the aid of language and their common character of incomprehensibility. (The Unconditioned is merely a common name for what transcends the laws of thought—for the *formally illegitimate*.) And while he appropriated Reason as a specific faculty to take cognisance of these negations, hypostatised as positive, under the Platonic name of *Ideas*; so also, as a pendant to his deduction of the Categories of Understanding from a logical division of *propositions*, he deduced the classification and number of these Ideas of Reason from a logical division of *sylogisms*.—Kant thus stands intermediate between those who view the notion of the Absolute as the instinctive affirmation of an encentric intuition, and those who regard it as the factitious negative of an eccentric generalisation.

Were we to adopt from the Critical Philosophy the purpose of

analysing thought into its fundamental conditions, and were we to carry the reduction of Kant to what we think its ultimate simplicity; we would discriminate thought into *positive* and *negative*, according as it is conversant about the Conditioned or the Unconditioned. This, however, would constitute a logical, not a psychological distinction; as positive and negative in thought are known at once, and by the same intellectual act. Kant's twelve Categories of the Understanding would be thus included under the former; his three Ideas of Reason under the latter; and thus the contrast between Understanding and Reason would disappear. Finally, rejecting the arbitrary limitation of Time and Space to the sphere of sense, we would express under the formula of—*THE CONDITIONED IN TIME AND SPACE*—a definition of the conceivable, and an enumeration of the three Categories of thought.*

The imperfection and partiality of Kant's analysis are betrayed in its consequences. His doctrine leads to absolute scepticism. Speculative reason, on Kant's own admission, is an organ of mere delusion. The Idea of the Unconditioned, about which it is conversant, is shown to involve insoluble contradictions, and yet to be the legitimate product of intelligence. Hume has well observed, "that it matters not whether we possess a false reason, or no reason at all." If "the light that leads astray, be light from heaven," what are we to believe? If our intellectual nature be perfidious in one revelation, it cannot be presumed truthful in any; nor is it possible for Kant to establish the existence of God, Free-will, and Immortality, on the supposed veracity of reason, in a practical relation, after having himself demonstrated its mendacity in a speculative.

Kant had annihilated the older metaphysic, but the germ of a more visionary doctrine of the Absolute (Infinito-absolute,) than any of those refuted, was contained in the bosom of his own philosophy. He had slain the body, but had not exorcised the spectre, of the Absolute; and this spectre has continued to haunt the schools of Germany even to the present day. The philosophers were not content to abandon their metaphysic; to limit philosophy to an observation of phenomena, and to the generalisation of these phenomena into laws. The theories of Bouterweck, (in his earlier works,) of Bardili, of Reinhold, of Fichte, of Schelling, of

* [See Appendix I. (A), for a more matured view of these Categories or conditions of thought.]

Hegel, and of sundry others, are just so many endeavours, of greater or of less ability, to fix the Absolute as a positive in knowledge; but the Absolute, like the water in the sieves of the Danaides, has always hitherto run through as a negative into the abyss of nothing.

3. Of these theories, that of SCHELLING is the only one in regard to which it is now necessary to say any thing. His opinion constitutes the third of those enumerated; and the following is a brief statement of its principal positions:—

While the lower sciences are of the relative and conditioned, *Philosophy*, as the science of sciences, must be of the *Absolute—the Unconditioned*. Is the Absolute then beyond our knowledge?—philosophy is itself impossible.

But how, it is objected, can the Absolute be *known*?—As unconditioned, identical, and one, it cannot be cognised under conditions, by difference and plurality; not therefore, if the subject of knowledge be distinguished from the object of knowledge. In a knowledge of the Absolute, existence and knowledge must be identical: the Absolute can only be known; if adequately known; and it can only be adequately known, by the Absolute itself. But is this possible? We are wholly ignorant of existence in itself:—the mind knows nothing, except in parts, by quality, and difference, and relation; consciousness supposes the subject contradistinguished from the object of thought; the abstraction of this contrast is a negation of consciousness; and the negation of consciousness is the annihilation of thought itself. The alternative is therefore unavoidable:—either finding the Absolute, we lose ourselves; or retaining self, and individual consciousness, we do not reach the Absolute.

All this Schelling frankly admits. He (and Fichte also) explicitly admits that a knowledge of the Absolute is impossible, in personality and consciousness: he admits that, as the understanding knows, and can know, only by consciousness, and consciousness only by difference, we, as conscious and understanding, can apprehend, can conceive only the Conditioned; and he admits that, only if man be himself the Infinite, can the Infinite be known by him.

“Nec sentire Deum, nisi qui pars ipse Deorum est;” *

(“None can feel God, who shares not in the Godhead.”)

* [This line is from *Manilius*. But as a statement of Schelling's doctrine it is inadequate; for on his doctrine the deity can be known only if fully

But Schelling contends that there is a capacity of knowledge above consciousness, and higher than the understanding, and that this knowledge is competent to human *reason*, as *identical with the Absolute itself*. In this act of knowledge (which, after Fichte, he calls the *Intellectual Intuition**), there exists no distinction of subject and object,—no contrast of knowledge and existence; all difference is lost in mere indifference,—all plurality in simple unity. The Intuition itself,—Reason,—and the Absolute are identified. The Absolute exists only as known by Reason; and Reason knows only as being itself the Absolute.

This act (act!) is necessarily ineffable:

“The vision and the faculty divine,”

known, and a full knowledge of deity is possible only to the absolute deity—that is, not to a sharer in the Godhead. Manilius has likewise another (poetically) laudable line, of a similar, though less exceptionable, purport:—

“Exemplumque Dei quisque est in imagine parva;”

(“Each is himself a miniature of God.”)

For we should not recoil to the opposite extreme; and, though man be not identical with the Deity, still is he “created in the image of God.” It is, indeed, only through an analogy of the human with the Divine nature, that we are percipient and recipient of Divinity. As *St Prosper* has it:—“Nemo possidet Deum, nisi qui possidetur a Deo.”—So *Seneca*:—“In unoquoque virorum bonorum habitat Deus.”—So *Plotinus*:—“Virtue tending to consummation, and irradiated in the soul by moral wisdom, reveals a God; but a God destitute of true virtue is an empty name.”—So *Jacobi*:—“From the enjoyment of virtue springs the idea of a virtuous; from the enjoyment of freedom, the idea of a free; from the enjoyment of life, the idea of a living; from the enjoyment of the divine, the idea of a godlike—and of a God.”—So *Goethe*:—

“Waer nicht das Auge sonnenhaft,

Wie koennten wir das Licht erblicken?

Lebt' nicht in uns des Gottes oigue Kraft,

Wie koennte uns das Goettliche entzuecken?”

So *Kant* and many others. (Thus morality and religion, necessity and atheism, rationally go together.)—The Platonists and Fathers have indeed finely and frequently said, that “God is the life of the soul, as the soul is the life of the body.”

“Vita Animæ Deus est; hæc Corporis. Hæc fugiente,

Solvitur hoc; perit hæc, destitnente Deo.”

These verses, which embody, almost in the same words, the sentiment of *St Austin*, are preserved to us from an ancient poet by *John of Salisbury*, and they denote the comparison of which *Buchanan* has made so admirable a use in his *Calvini Epicedium*.]

* [This expression remonnts however to *Cusa*. See what is said of him in Appendix I. (B).]

to be known, must be experienced. It cannot be conceived by the understanding, because beyond its sphere; it cannot be described, because its essence is identity, and all description supposes discrimination. To those who are unable to rise beyond a philosophy of reflection, Schelling candidly allows that the doctrine of the Absolute can appear only a series of contradictions; and he has at least the negative merit of having clearly exposed the impossibility of a philosophy of the Unconditioned, as founded on a knowledge by difference, if he utterly fails in positively proving the possibility of such a philosophy, as founded on a knowledge in identity, through an absorption into, and vision of, the Absolute.

Out of Laputa or the Empiro it would be idle to enter into an articulate refutation of a theory, which founds philosophy on the annihilation of consciousness, and on the identification of the unconscious philosopher with God. The Intuition of the Absolute is manifestly the work of an arbitrary abstraction, and of a self-delusive imagination. To reach the point of indifference,—by abstraction we annihilate the object, and by abstraction we annihilate the subject, of consciousness. But what remains?—*Nothing*. "*Nil conscimus nobis.*" We then hypostatise the zero; we baptize it with the name of *Absolute*; and conceit ourselves that we contemplate absolute existence, when we only speculate absolute privation.* This truth has been indeed virtually confessed by the two most distinguished followers of Schelling. Hegel at last abandons the Intuition, and regards "*pure or undetermined existence*" as convertible with "*pure nothing*;" whilst Oken, if he adhere to the Intuition, intrepidly identifies the Deity or Absolute

* [The Infinite and Absolute are only the names of two counter imbecillities of the human mind, transmuted into properties of the nature of things,—of two subjective negations, converted into objective affirmations. We tire ourselves, either in adding to, or in taking from. Some, more reasonably, call the thing unfinishable—*infinite*; others, less rationally, call it finished—*absolute*. But in both cases, the metastasis is in itself irrational. Not, however, in the highest degree: for the subjective contradictories were not at first objectified by the same philosophers; and it is the crowning irrationality of the Infinito-absolutists, that they have not merely accepted as objective what is only subjective, but quietly assumed as the same, what are not only different but conflictive, not only conflictive, but repugnant. Seneca (Ep. 118) has given the true genealogy of the original fictions; but at his time the consummative union of the two had not been attempted. "*Ubi animus aliquid diu protulit, et magnitudinem ejus sequendo lassatus est, infinitum coepit vocari. Eodem modo, aliquid difficulter seculi cogitavimus, novissime, crescente difficultate, insecabile inventum est.*"]



with zero. God, he makes the Nothing, the Nothing, he makes God ;

" And Naught is ev'rything, and ev'rything is Naught."*

Nor does the negative chimæra prove less fruitful than the positive; for Schelling has found it as difficult to evolve the one into the many, as his disciples to deduce the universe and its contents from the first self-affirmation of the " primordial Nothing."

" Miri homines! *Nihil* esse aliquid statuante negent; Quodque negant statunnt, quod statunntque negant."

To Schelling, indeed, it has been impossible, without gratuitous and even contradictory assumptions, to explain the deduction of the finite from the infinite. By no *salto mortale* has he been able to clear the magic circle in which he had enclosed himself. Unable to connect the unconditioned and the conditioned by any natural correlation, he has variously attempted to account for the phenomenon of the universe, either by imposing a necessity of self-manifestation on the absolute, *i. e.* by conditioning the unconditioned; or by postulating a fall of the finite from the infinite, *i. e.* by begging the very fact which his hypothesis professed its exclusive ability to explain.—The veil of Isis is thus still withdrawn;† and the question proposed by Orpheus at the

* [From the *Rejected Addresses*. Their ingenious authors have embodied a jest in the very words by which Oken, in sober seriousness, propounds the first and greatest of philosophical truths. Jacobi (or Neeb?) might well say, that, in reading this last consummation of German speculation, he did not know whether he was standing on his head or his feet. The book in which Oken so ingeniously deduces the All from the Nothing, has, I see, been lately translated into English, and published by the Ray Society (I think). The statement of the paradox is, indeed, somewhat softened in the second edition, from which, I presume, the version is made. Not that Oken and Hegel are original even in the absurdity. For as Varro right truly said:—"Nihil tam absurde dici potest, quod non dicatur ab aliquo philosophorum;" so the Intuition of God = the Absolute, = the Nothing, we find asserted by the lower Platonists, by the Buddhists, and by Jacob Boehme.—And yet there is a sense in which these paradoxical dicta admit of a favourable interpretation.]

† [Isis appears as the Ægypto-Grecian symbol of the Unconditioned. (*Ἰσις*—*Ἰσις*—*Οὐσία*: *Ἰσιον*,—*γνώσις τοῦ ὄντος*. Plutarch, *Isis et Osiris*.) In the temple of Athene-Isis, at Sais, on the fane there stood this sublime inscription:

" I AM ALL THAT WAS, AND IS, AND SHALL BE ;

NOR MY VEIL, HAS IT BEEN WITHDRAWN BY MORTAL."

(*"Ἐγὼ εἰμι πᾶν τὸ γιγνόμεν, καὶ ὄν, καὶ ᾗσόμενον, καὶ τὸν ἰμὸν πίπλον οὐδὲν ποθῆναι ἀπὸ κάλυψις."*)]

dawn of speculation will probably remain unanswered at its setting,—

Πῶς δὲ μοι ἔν τι τὰ πάντα ἕσται, καὶ χωρὶς ἑαυτοῦ ;"
 ("How shall I think—each, separate and all, one?")

In like manner, annihilating consciousness in order to reconstruct it, Schelling has never yet been able to connect the faculties conversant about the conditioned, with the faculty of absolute knowledge. One simple objection strikes us as decisive, although we do not remember to have seen it alleged. "We awaken," says Schelling, "from the Intellectual Intuition as from a state of death; we awaken by Reflection, that is, through a compulsory return to ourselves."* We cannot, at the same moment, be in the intellectual intuition and in common consciousness; we must therefore be able to connect them by an act of memory—of recollection. But how can there be a *remembrance* of the Absolute and its Intuition? As out of time, and space, and relation, and difference, it is admitted that the Absolute cannot be construed to the understanding? But as remembrance is only possible under the conditions of the understanding, it is consequently impossible to remember anything anterior to the moment when we awaken into consciousness; and the *clairvoyance* of the Absolute, even granting its reality, is thus, after the crisis, as if it had never been. We defy all solution of this objection.—But it may be put in another form: *To know* the Absolute and *to be* the Absolute are, ex hypothesi, one and the same. Therefore, in the Intellectual Intuition, the individual speculator, the conscious Schelling, Steffens, Oken is annihilated; and, e contra, the Intellectual Intuition is impossible for the philosopher in a state of personal individuality and consciousness. But it is in this state of personality, and non-intuition of the Absolute, that the philosopher writes; in writing therefore about the Absolute, he writes of what is to him as zero. His system is thus a mere scheme of words.

4. What has now been stated may in some degree enable the reader to apprehend the relations in which our author stands, both to those who deny and to those who admit a knowledge of the Absolute. If we compare the philosophy of Cousin with the philosophy of Schelling, we at once perceive that the former is a disciple, though by no means a servile disciple of the latter. The scholar, though enamoured with his master's system as a whole,

* In Fichte's u. Niethammer's Philos. Journ. vol. iii. p. 214.

is sufficiently aware of the two insuperable difficulties of that theory. He saw, that if he pitched the Absolute so high, it was impossible to deduce from it the relative; and he felt, probably, that the Intellectual Intuition—a stumbling-block to himself—would be arrant foolishness in the eyes of his countrymen.—Cousin and Schelling agree, that as philosophy is the science of the Unconditioned, the Unconditioned must be within the compass of science. They agree that the Unconditioned is known, and immediately known: and they agree that intelligence, as competent to the Unconditioned, is impersonal, infinite, divine.—But while they coincide in the fact of the Absolute, as known, they are diametrically opposed as to the mode in which they attempt to realize this knowledge; each regarding, as the climax of contradiction, the manner in which the other endeavours to bring human reason and the Absolute into proportion. According to Schelling, Cousin's Absolute is only a relative; according to Cousin, Schelling's knowledge of the Absolute is a negation of thought itself. Cousin declares the condition of all knowledge to be plurality and difference; and Schelling, that the condition, under which alone a knowledge of the Absolute becomes possible, is indifference and unity. The one thus denies a notion of the Absolute to consciousness; whilst the other affirms that consciousness is implied in every act of intelligence. Truly, we must view each as triumphant over the other; and the result of this mutual neutralisation is,—that the Absolute, the Infinite, the Unconditioned, of which both assert a knowledge, is for us incognisable.*

* [*“Quod genus hoc pugna, qua victor victus uterque!”*]

is still further exhibited in the mutual refutation of the two great apostles of the Absolute, in Germany,—Schelling and Hegel. They were early friends,—contemporaries at the same university,—occupiers of the same bursar room, (college chums,)—Hegel, somewhat the elder man, was somewhat the younger philosopher,—and they were joint editors of the journal in which their then common doctrine was at first promulgated. So far all was in unison; but now they separated, locally and in opinion. Both, indeed, stuck to the Absolute, but each regarded the way in which the other professed to reach it, as absurd. Hegel derided the Intellectual Intuition of Schelling, as a poetical play of fancy; Schelling derided the Dialectic of Hegel, as a logical play with words. Both, I conceive, were right; but neither fully right. If Schelling's Intellectual Intuition were poetical, it was a poetry transcending, in fact abolishing, human imagination. If Hegel's Dialectic were logical, it was a logic, outraging that science and the conditions of thought itself. Hegel's whole philosophy is indeed founded on two errors;—on a mistake in logic, and on a violation of logic. In his dream of

In these circumstances, we might expect our author to have stated the difficulties to which his theory was exposed on the one side and on the other; and to have endeavoured to obviate the objections, both of his brother Absolutists, and of those who altogether deny a philosophy of the Unconditioned. This he has not done. The possibility of reducing the notion of the Absolute to a negative conception is never once contemplated; and if one or two allusions (not always, perhaps, correct) are made to his doctrine, the name of Schelling does not occur, as we recollect, in the whole compass of these lectures. Difficulties, by which either the doctrine of the Absolute in general, or his own particular modification of that doctrine, may be assailed, are, if not avoided, solved only by still greater. Assertion is substituted for proof; facts of consciousness are alleged, which consciousness never knew; and paradoxes, that baffle argument, are promulgated as intuitive truths, above the necessity of confirmation. With every feeling of respect for M. Cousin as a man of learning and genius, we must regard the grounds on which he endeavours to establish his doctrine as assumptive, inconsequent, and erroneous. In vindicating the truth of this statement, we shall attempt to show:—in the *first* place, that M. Cousin is at fault in all the authorities he quotes in favour of the opinion, that the Absolute, Infinite, Unconditioned, is a primitive notion, cognisable by our intellect; in the *second*, that his argument to prove the correality of his three Ideas proves directly the reverse; in the *third*, that the conditions under which alone he allows intelligence to be possible, necessarily exclude the possibility of a knowledge, not to say a conception, of the Absolute; and in the *fourth*, that the Absolute, as defined by him, is only a relative and a conditioned.

disproving the law of Excluded Middle (between two Contradictories), he inconceivably mistakes Contraries for Contradictories; and in positing pure or absolute existence as a mental datum, immediate, intuitive, and above proof, (though, in truth, this be palpably a mere relative gained by a process of abstraction,) he not only mistakes the fact, but violates the logical law which prohibits us to assume the principle which it behoves us to prove. On these two fundamental errors rests Hegel's Dialectic; and Hegel's Dialectic is the ladder by which he attempts to scale the Absolute.—The peculiar doctrine of these two illustrious thinkers is thus to me only another manifestation of an occurrence of the commonest in human speculation; it is only a sophism of relative self-love, victorious over the absolute love of truth:—"Quod volunt sapient, et nolunt sapere quæ vera sunt."]

In the *first* place, then, M. Cousin supposes that Aristotle and Kant, in their several *categories*, equally proposed an analysis of the constituent elements of intelligence; and he also supposes that each, like himself, recognised among these elements the notion of the Infinite, Absolute, Unconditioned. In both these suppositions we think him wrong.

It is a serious error in a historian of philosophy to imagine that, in his scheme of Categories, Aristotle proposed, like Kant, "an analysis of the elements of human reason." It is just, however, to mention, that in this mistake M. Cousin has been preceded by Kant himself. But the ends proposed by the two philosophers were different, even opposed. In their several tables:—Aristotle attempted a synthesis of things in their multiplicity,—a classification of objects real, but in relation to thought;—Kant, an analysis of mind in its unity,—a dissection of thought, pure, but in relation to its objects. The Predicaments of Aristotle are thus objective, of things as understood; those of Kant subjective, of the mind as understanding. The former are results *a posteriori*—the creations of abstraction and generalisation; the latter, anticipations *a priori*—the conditions of those acts themselves. It is true, that as the one scheme exhibits the unity of thought divorcing into plurality, in appliance to its objects, and the other, exhibits the multiplicity of these objects converging towards unity by a collective determination of the mind; while, at the same time, language usually confounds the subjective and objective under a common term;—it is certainly true, that some elements in the one table coincide in name with some elements in the other. This coincidence is, however, only equivocal. In reality, the whole Kantian Categories would be generally excluded from those of Aristotle, as *entia rationis*, as *notiones secundæ*—in short, as determinations of thought, and not genera of real things; while the several elements would be also specially excluded, as *partial*, *privative*, *transcendent*, &c. But if it would be unjust to criticise the Categories of Kant in whole, or in part, by the Aristotelic canons, what must we think of Kant, who, after magnifying the idea of investigating the forms of pure intellect as worthy of the mighty genius of the Stagirite, proceeds, on this false hypothesis, to blame the execution as a kind of patch work, as incomplete, as confounding derivative with simple notions; nay, even on the narrow principles of his own *Critique*, as mixing the forms of pure

Sense with the forms of pure Understanding?—If M. Cousin also were correct in his supposition, that Aristotle and his followers had viewed his *Categories* as an analysis of the fundamental forms of thought, he would find his own reduction of the elements of reason to a double principle anticipated in the scholastic division of existence into *ens per se* and *ens per accidens*.

Nor is our author correct in thinking that the *Categories* of Aristotle and Kant are complete, inasmuch as they are co-extensive with his own.—As to the former, if the Infinite were not excluded, on what would rest the scholastic distinction of *ens categoricum* and *ens transcendens*? The logicians require that predicamental matter shall be of a limited and finite nature;† God, as infinite, is thus excluded: and while it is evident from the whole context of his book of *Categories*, that Aristotle there only contemplated a distribution of the finite, so, in other of his works, he more than once emphatically denies the Infinite as an object not only of knowledge, but of thought; “Τὸ ἀπείρον ἀγνώστου ἢ ἀπειρου,” and “Τὸ ἀπείρον, οὐκ νοητόν, οὐκ αἰσθητόν.”‡—But if Aristotle thus regards the Infinite as beyond the compass of thought, Kant views it as, at least, beyond the sphere of knowledge. If M. Cousin indeed employed the term *Category* in relation to the Kantian philosophy in the Kantian acceptation, he would be as erroneous in regard to Kant as he is in regard to Aristotle; but we presume that he wishes, under that term, to include not only the “*Categories of Understanding*,” but the “*Ideas of Reason*.”§ But

* See the *Kritik d. r. V.* and the *Prolegomena*.

† [M. Peisse, in a note here, quotes the common logical law of categorical entities, well and briefly expressed in the following verse:—

“*Entia per sese, finita, realia, tota.*”

He likewise justly notices, that nothing is included in the Aristotelic categories but what is susceptible of definition, consequently of analysis.]

‡ *Phys. L. i. c. 4*, text. 35; *L. iii. c. 10*, text. 66, c. 7, text. 40. See also *Metaph. L. ii. c. 2*, text. 11. *Analyt. Post. L. i. c. 20*, text. 39—et alibi.—[Aristotle's definition of the *Infinite*, (of the ἀπείρον in contrast to the αἰετόν)—“*that of which there is always something beyond*,” may be said to be a definition only of the *Indefinite*. This I shall not gainsay. But it was the only Infinite which he contemplated; and it is the only Infinite of which we can form a notion.]

§ [“The *Categories* of Kant are simple forms or frames (*schemata*) of the *Understanding (Verstand)* under which, an object to be known, must be necessarily thought.—Kant's *Ideas*, a word which he expressly borrowed from Plato, are concepts of the *Reason (Vernunft)*; whose objects transcending the sphere of all experience actual or possible, consequently do not

Kant limits knowledge to experience, and experience to the Categories of the understanding, which, in reality, are only so many forms of the Conditioned; and allows to the notion of the Unconditioned, (corresponding to the Ideas of Reason) no objective reality, regarding it merely as a regulative principle in the arrangement of our thoughts.—As M. Cousin, however, holds that the Unconditioned is not only *subjectively conceived*, but *objectively known*; he is totally wrong in regard to the one philosopher, and wrong in part in relation to the other.

In the *second* place, our author maintains that the idea of the Infinite, or Absolute, and the idea of the Finite or Relative, are equally real, because the notion of the one necessarily suggests the notion of the other.

Correlatives certainly suggest each other, but correlatives may, or may not, be equally real and positive. In thought contradictories necessarily imply each other, for the knowledge of contradictories is one. But the reality of one contradictory, so far from guaranteeing the reality of the other, is nothing else than its negation. Thus every positive notion (the concept of a thing by what it is), suggests a negative notion (the concept of a thing by what it is not), and the highest positive notion, the notion of the Conceivable, is not without its corresponding negative in the notion of the Inconceivable. But though these mutually suggest each other, the positive alone is real; the negative is only an abstraction of the other, and in the highest generality, even an abstraction of thought itself. It therefore behoved M. Cousin, instead of assuming the objective correlativity of his two elements on the fact of their subjective correlation, to have suspected, on this very ground, that the reality of the one was inconsistent with the reality of the other. In truth, upon examination, it will be found that his two primitive Ideas are nothing more than contradictory relatives. These, consequently, of their very nature, imply each other in thought; but they imply each other only as affirmation and negation of the same.

We have already shown, that though the Conditioned (conditionally limited) be one, what is opposed to it as the Unconditioned, is plural: that the unconditional negation of limitation gives one

fall under the categories, in other words, are positively unknowable. These ideas are God, Matter, Soul, objects which, considered out of relation, or in their *transcendent reality*, are so many phases of the *Absolute*."—M. Pease.]

unconditioned, the Infinite ; as the unconditional affirmation of limitation affords another, the Absoluto. This, while it coincides with the opinion, that the Unconditioned in either phasis is inconceivable, is repugnant to the doctrine, that the Unconditioned (absoluto-infinite) can be positively construed to the mind. For those who, with M. Cousin, regard the notion of the Unconditioned as a positive and real knowledge of existence in its all-comprehensive unity, and who consequently employ the terms *Absolute, Infinite, Unconditioned*, as only various expressions for the same identity, are imperatively bound to prove, that their *One corresponds—either with that Unconditioned which we have distinguished as the Absolute,—or with that Unconditioned which we have distinguished as the Infinite,—or that it includes both,—or that it excludes both.* This they have not done, and, we suspect, have never attempted to do.

Our author maintains, that the Unconditioned is known under the laws of consciousness ; and does not, like Schelling, pretend to an intuition of existence beyond the bounds of Space and Time. Indeed, he himself expressly predicates the Absolute and Infinite of these forms.

Time is only the image or the concept of a certain correlation of existences—of existence, therefore, pro tanto, *as conditioned.* *It is thus itself only a form of the Conditioned.* But let that pass.—Is, then, the *Absolute* conceivable of time ? Can we conceive Time as unconditionally limited ? We can easily represent to ourselves time under any relative limitation of commencement and termination ; but we are conscious to ourselves of nothing more clearly, than that it would be equally possible to think without thought, as to construe to the mind an absolute commencement, or an absolute termination, of time ; that is, a beginning and an end, beyond which, time is conceived as non-existent. Good imagination to the utmost, it still sinks paralysed within the bounds of Time ; and time survives as the condition of the thought itself in which we annihilate the universe :

“ Sur les mondes détruits le Temps dort immobile.”

But if the Absolute be inconceivable of this form, is the *Infinite* more comprehensible ? Can we imagine Time as unconditionally unlimited ?—We cannot conceive the infinite regress of time ; for such a notion could only be realized by the infinite addition in thought of finite times, and such an addition would, itself, require an eternity for its accomplishment. If we dream of effecting this,

we only deceive ourselves by substituting the *indefinite* for the infinite, than which no two notions can be more opposed.—The negation of the commencement of time involves likewise the affirmation, that an infinite time has at every moment already run; that is, it implies the contradiction, that an infinite has been completed.—For the same reasons we are unable to conceive an infinite progress of Time:—While the infinite regress and the infinite progress, taken together, involve the *triple* contradiction,—of an infinite concluded,—of an infinite commencing,—and of two infinities, not exclusive of each other.

Space, like time, is only the intuition or the concept of a certain correlation of existence—of existence, therefore, *pro tanto*, *as conditioned*. *It is thus itself only a form of the conditioned*. But apart from this, thought is equally powerless in realizing a notion either of the *absolute totality*, or of the *infinite immensity*, of space.—And while time and space, as wholes, can thus neither be conceived as absolutely limited, nor as infinitely unlimited; so their parts can be represented to the mind neither as *absolutely individual*, nor as *divisible to infinity*. The universe cannot be imagined as a whole, which may not also be imagined as a part; nor an atom be imagined as a part, which may not also be imagined as a whole.

The same analysis, with a similar result, can be applied to *cause and effect*, and to *substance and phenomenon*. These, however, may both be reduced to the law itself of the Conditioned.*

The Conditioned is, therefore, that only which can be positively conceived; the Absolute and Infinite are conceived only as negations of the Conditioned in its opposite poles.

Now, as we observed, M. Cousin, and those who confound the Absolute and Infinite, and regard the Unconditioned as a positive and indivisible notion, must show that this notion coincides either, 1°, with the notion of the Absolute, to the exclusion of the Infinite; or 2°, with the notion of the Infinite, to the exclusion of the Absolute; or 3°, that it includes both as true, carrying them up to indifference; or 4°, that it excludes both as false. The last two alternatives are impossible;† as either would be

* [See Appendix I. (A) for the applications of that doctrine.]

† [The Absolutists, however, find it necessary to assert it; which they do more or less explicitly. Thus *Cusa* (Opera, pp. 3, 4, 26, 66, &c.); *Bruno* (De Minimo, p. 17, et alibi). And to speak only of the more recent: *Schelling* (Akad. Stud. p. 127, and ninth letter of the Briefe ueber Dogmatismus);

subversive of the highest principle of intelligence, which asserts, that of two contradictories, both cannot, but one must, be true. It only, therefore, remains to identify the unity of the Unconditioned with the Infinite, or with the Absolute—with either, to the exclusion of the other. But while every one must be intimately conscious of the impossibility of this, the very fact that our author and other philosophers *a priori* have constantly found it necessary to confound these contradictions, sufficiently proves that neither term has a right to represent the unity of the unconditioned, to the prejudice of the other.*

The Unconditioned is, therefore, not a positive concept; nor has it even a real or intrinsic unity; for it only combines the Absolute and the Infinite, in themselves contradictory of each other, into a unity *relative to us* by the *negative* bond of their inconceivability. It is on this mistake of the relative for the irrelative, of the negative for the positive, that M. Cousin's theory is founded: And it is not difficult to understand how the mistake originated.

This reduction of M. Cousin's two Ideas of the Infinite and Finite to one positive conception and its negative, implicitly annihilates also the *third* Idea, devised by him as a connection between his two substantive ideas; and which he marvellously identifies with the relation of Cause and Effect.

Yet before leaving this part of our subject, we may observe, that the very simplicity of our analysis is a strong presumption in favour of its truth. A plurality of causes is not to be postulated, where one is sufficient to account for the phenomena, (*Entia non sunt multiplicanda præter necessitatem*): and M. Cousin, in supposing three positive ideas, where only one is necessary, brings the rule of parsimony against his hypothesis, even before its unsoundness may be definitely brought to light.

In the *third* place, the restrictions to which our author subjects intelligence, divine and human, implicitly deny a knowledge—even a concept—of the Absolute, both to God and man.—“The

Hegel (Krit. Journal, ii. vol. pp. 159, 160.) These references might be indefinitely multiplied.]

* [The first three cases had, indeed, been realised in the Eleatic school alone. The first by Parmenides, the second by Melissus, the third by Xenophanes. The fourth has not, I presume, been explicitly held by any philosopher; but the silent confusion of the Absolute and Infinite has been always common enough.]

condition of intelligence," says M. Cousin, "*is difference*; and an act of knowledge is only possible where there exists a *plurality of terms*. Unity does not suffice for conception; variety is necessary; nay more, not only is variety necessary, there must likewise subsist an intimate relation between the principles of unity and variety; without which, the variety not being perceived by the unity, the one is as if it could not perceive, and the other, as if it could not be perceived. Look back for a moment into yourselves, and you will find, that what constitutes intelligence in our feeble consciousness, is, that there are there several terms, of which the one perceives the other, of which the other is perceived by the first: in this consists self-knowledge,—in this consists self-comprehension,—in this consists intelligence: intelligence without consciousness is the abstract possibility of intelligence, not intelligence in the act; and consciousness implies diversity and difference. Transfer all this from human to absolute intelligence;—that is to say, refer the ideas to the only intelligence to which they can belong. You have thus, if I may so express myself, the life of absolute intelligence; you have this intelligence with the complete development of the elements which are necessary for it to be a true intelligence; you have all the *momenta* whose relation and motion constitute the reality of knowledge."—In all this, so far as human intelligence is concerned, we cordially agree; for a more complete admission could not be imagined, not only that a knowledge, or even a notion, of the Absolute is impossible for man, but that we are unable to conceive the possibility of such cognition, even in the Deity, without contradicting our human conceptions of the possibility of intelligence itself. Our author, however, recognises no contradiction; and, without argument or explanation, accords a knowledge of that which can only be known under the negation of all difference and plurality, to that which can only know under the affirmation of both.

If a knowledge of the Absolute were possible under these conditions, it may excite our wonder that other philosophers should have viewed this supposition as utterly impossible; and that Schelling, whose acuteness was never questioned, should have exposed himself gratuitously to the reproach of mysticism, by his postulating for a few, and through a faculty above the reach of consciousness, a knowledge already given to all in the fact of consciousness itself. Monstrous as is the postulate of the Intellectual Intuition, we freely confess that it is only through such a faculty

that we can imagine the possibility of a science of the Absolute; and have no hesitation in acknowledging, that if Schelling's hypothesis appear to us incogitable, that of Cousin is seen to be self-contradictory.

Our author admits, and must admit, that the Absolute, as absolutely universal, is absolutely *one*; absolute unity is convertible with the absolute negation of plurality and difference; *the Absolute*, and *the Knowledge of the Absolute*, are therefore *identical*. But knowledge, or intelligence, it is asserted by M. Cousin, supposes a plurality of terms—the plurality of subject and object. Intelligence, whose essence is plurality, cannot therefore be identified with the Absolute, whose essence is unity; and if known, the Absolute, *as known*, must be different from the Absolute, *as existing*; that is, there must be two Absolutes—an Absolute in knowledge, and an Absolute in existence: which is contradictory.

But waiving this contradiction, and allowing the non-identity of knowledge and existence, the Absolute as known must be known under the conditions of the Absolute as existing, that is, as *absolute unity*. But, on the other hand, it is asserted, that the condition of intelligence, as knowing, is plurality and difference; consequently the condition of the Absolute, as existing, and under which it must be known, and the condition of intelligence, as capable of knowing, are incompatible. For, if we suppose the Absolute cognisable: it must be identified either—1°, with the subject knowing; or, 2°, with the object known; or, 3°, with the indifference of both. The *first* hypothesis, and the *second*, are *contradictory of the absolute*. For in these the Absolute is supposed to be known, either as contradistinguished from the knowing subject, or as contradistinguished from the object known; in other words, the Absolute is asserted to be known as absolute unity, *i. e.* as the negation of all plurality, while the very act by which it is known, affirms plurality as the condition of its own possibility. The *third* hypothesis, on the other hand, is *contradictory of the plurality of intelligence*; for if the subject and the object of consciousness be known as one, a plurality of terms is not the necessary condition of intelligence. The alternative is therefore necessary:—*Either* the Absolute cannot be known or conceived at all; *or* our author is wrong in subjecting thought to the conditions of plurality and difference. It was the iron necessity of the alternative that constrained Schelling to resort to the hypothesis of a knowledge in identity through the Intellectual

Intuition; and it could only be from an oversight of the main difficulties of the problem, that M. Cousin, in abandoning the Intellectual Intuition, did not abandon the Absolute itself. For how that, whose essence is all-comprehensive unity, can be known by the negation of that unity under the condition of plurality; how that, which exists only as the identity of all difference, can be known under the negation of that identity, in the antithesis of subject and object, of knowledge and existence:—these are contradictions which M. Cousin has not attempted to solve,—contradictions which he does not seem to have contemplated.

In the *fourth* place.—The objection of the inconceivable nature of Schelling's Intellectual Intuition, and of a knowledge of the Absolute in identity, apparently determined our author to adopt the opposite, but suicidal, alternative,—of a knowledge of it in consciousness, and by difference.—The equally insuperable objection,—that from the Absolute defined as absolute, Schelling had not been able, without inconsequence, to deduce the Conditioned, seems, in like manner, to have influenced M. Cousin to define the Absolute by a relative; not observant, it would appear, that though he thus facilitated the derivation of the Conditioned, he annihilated in reality the Absolute itself. By the former proceeding, our author virtually denies its possibility *in thought*; by the latter, its possibility *in existence*.

The Absolute is defined by our author, “an absolute *cause*,—a cause which *cannot but pass into act*.”—Now, it is sufficiently manifest, that a thing *existing absolutely* (i. e. not under relation), and a thing *existing absolutely as a cause*, are contradictory. The former is the absolute negation of all relation; the latter is the absolute affirmation of a particular relation. A cause is a *relative*, and what exists absolutely as a cause, exists absolutely under relation.* Schelling has justly observed, that “he would deviate wide as the poles from the idea of the Absolute, who would think of defining its nature by the notion of *activity*.”† But he who would define the Absolute by the notion of a *cause*, would deviate still more widely from its nature; inasmuch as the notion

* [“Πάν μίτρον, ὡς μίτρον, διαφέρει λεπτὸν τυγχάνει ἐπὶ τινος, καὶ πρὸς τὸ νοεῖται.” κ. τ. λ. (Clement Alexandrinus, Strom. L. viii., p. 785, ed. 1688.) See also Maimonides (More Nevochim, P. I., c. 69) in reference to the Meddabarim or Mahommedan sect of Speakers in the Law; and Ænesidemus in Sextus Empiricus, passim.]

† Bruno, p. 171.

of a cause involves not only the notion of a determination to activity, but of a determination to a particular, nay, to a dependent, kind of activity,—an activity not immanent, but transeunt. What exists merely as a cause, exists merely for the sake of something else,—is not final in itself, but simply a mean towards an end; and in the accomplishment of that end, it consummates its own perfection. Abstractly considered, the effect is therefore superior to the cause. A cause, as cause, may indeed be better than one or two or any given number of its effects. But the *total* complement of the effects of what exists *only* as a cause, is better than that which, *ex hypothesi*, exists merely for the sake of their production.—Further, not only is an absolute cause dependent on the effect for its *perfection*,—it is dependent on it even for its *reality*. For to what extent a thing exists necessarily as a cause, to that extent it is not all-sufficient to itself; since to that extent it is dependent on the effect, as on the condition through which alone it realises its existence; and what exists absolutely as a cause, exists therefore in absolute dependence on the effect for the reality of its existence. An absolute cause, in truth, only exists *in its effects*: it never *is*, it always *becomes*; for it is an existence *in potentia*, and not an existence *in actu*, except through and by its effects. The Absolute is thus, at best, something merely inchoative and imperfect.

The definition of the *Absolute* by *absolute cause* is, therefore, suicidal; for it defines by relation and conditions, that which is conceived only as exclusive of both.—The same is true of the definition of the Absolute by *substance*. But of this we do not now speak.

The vice of M. Cousin's definition of the Absolute by *absolute cause*, is manifested likewise in its applications. He maintains that his theory can alone explain the nature and relations of the Deity; and on its incompetency to fulfil the conditions of a rational theism, we are willing to rest our demonstration of its radical unsoundness.

"God," says our author, "creates; he creates in virtue of his creative power, and he draws the universe, not from nonentity, but from himself, who is absolute existence. His distinguishing characteristic being an absolute creative force, which cannot but pass into activity, it follows, not that the creation is possible, *but that it is necessary*."

We must be very brief.—The subjection of the Deity to a

necessity—a necessity of self manifestation identical with the creation of the universe, is contradictory of the fundamental postulates of a divine nature. On this theory, God is *not distinct* from the world; the creature is a modification of the creator; and whilst creating is an act necessary to the Deity, as he is eternal, so must creation be *eternal*, and the universe consequently without beginning.—Now, without objecting, that the simple subordination of the Deity to necessity, is in itself, by depriving him of liberty, tantamount to his dethronement, let us see to what consequences this necessity, on the hypothesis of M. Cousin, inevitably leads. On this hypothesis, one of two alternatives must be admitted. God, as necessarily determined to pass from absolute essence to relative manifestation, is determined to pass either *from the better to the worse*, or *from the worse to the better*. A third possibility, that *both states are equal*, as contradictory in itself, and as contradicted by our author, it is not necessary to consider.

The *first* supposition must be rejected. The necessity in this case determines God to pass from the better to the worse; that is, operates to his partial annihilation. The power which compels this must be external and hostile, for nothing operates willingly to its own deterioration; and, as superior to the pretended God, is either itself the real deity, if an intelligent and free cause, or a negation of all deity, if a blind force or fate.

The *second* is equally inadmissible:—that God, passing into the universe, passes from a state of comparative imperfection, into a state of comparative perfection. The divine nature is identical with the *most perfect nature*, and is also identical with the *first cause*. If the first cause be not identical with the most perfect nature, there is no God, for the two essential conditions of his existence are not in combination. Now, on the present supposition, the most perfect nature is the derived; nay the universe, the creation, the *γινόμενον*, is, in relation to its cause, the real, the actual, the *ὄντως ὄν*. It would also be the divine, but that divinity supposes also the notion of cause, while the universe, *ex hypothesi*, is only an effect.

It is no answer to these difficulties for M. Cousin to say, that the Deity, though a cause which cannot choose but create, is not however exhausted in the act; and though passing with all the elements of his being into the universe, that he remains entire in his essence, and with all the superiority of the cause over the effect. The dilemma is unavoidable:—*Either*, the Deity is independent of

the universe for his being or perfection ; on which alternative our author must abandon his theory of God, and the necessity of creation : Or the Deity is dependent on his manifestation in the universe for his being or perfection ; on which alternative, his doctrine is assailed by the difficulties previously stated.

The length to which the preceding observations have extended, prevents us from advertng to sundry other opinions of our author, which we conceive to be equally unfounded.—For example, (to say nothing of his proof of the *impersonality of intelligence*, because, forsooth, truth is not subject to our will), what can be conceived more self-contradictory than his theory of *moral liberty* ? Divorcing liberty from intelligence, but connecting it with personality, he defines it to be a cause which is determined to act by its proper energy alone. But (to say nothing of remoter difficulties) how liberty can be conceived, supposing always a plurality of modes of activity, without a knowledge of that plurality ;—how a faculty can resolve to act by preference in a particular manner, and not determine itself by final causes ;—how intelligence can influence a blind power without operating as an efficient cause ;—or how, in fine, morality can be founded on a liberty which, at best, only escapes necessity by taking refuge with chance :—these are problems which M. Cousin, in none of his works, has stated, and which we are confident he is unable to solve.

After the tenor of our previous observations, it is needless to say that we regard M. Cousin's attempt to establish a general peace among philosophers, by the promulgation of his Eclectic theory, as a failure. But though we convert to his Unconditioned, and viewing with regret what we must regard as the misapplication of his distinguished talents, we cannot disown a strong feeling of interest and admiration for these qualities, even in their excess, which have betrayed him, with so many other aspiring philosophers, into a pursuit which could only end in disappointment ;—we mean his love of truth, and his reliance on the powers of man. Not to despair of philosophy is “ a last infirmity of noble minds.” The stronger the intellect, the stronger the confidence in its force ; the more ardent the appetite for knowledge, the less are we prepared to canvass the uncertainty of the fruition. “ The wish is parent to the thought.” Loath to admit that our science is at best the reflection of a reality we cannot know, we strive to penetrate to existence in itself ; and what we have laboured intensely to attain, we at last fondly believe we have accomplished. But.

like Ixion, we embrace a cloud for a divinity. Conscious only of, —conscious only in and through, limitation, we think to comprehend the Infinite; and dream even of establishing the science—the *nescience* of man, on an identity with the omniscience of God. It is this powerful tendency of the most vigorous minds to transcend the sphere of our faculties, which makes a “learned ignorance” the most difficult acquirement—perhaps, indeed, the consummation, of knowledge. In the words of a forgotten, but acute philosopher:—*“Magna, immo maxima pars sapientiæ est,—quædam æquo animo nescire velle.”* *

[“INFINITAS! INFINITAS!

Hic mundus est infinitas.	Secare mens at pergito,
Infinitas et totus est,	Nunquam secare desine;
(Nam mente nunquam absolveris;)	In sectione qualibet
Infinitas et illius	Infinitates dissecas.—
Pars quælibet, partisque pars.	Quiesce mens heic denique,
Quod tangis est infinitas;	Arctosque nosce limites
Quod cernis est infinitas;	Queis contineris undique;
Quod non vides corpusculum,	Quiesce mens, et limites
Sed mente sola concipis,	In orbe cessa quærere.
Corpusculi et corpusculum,	Quod quæris in te repperis:
Hujusque pars corpusculi,	In mente sunt, in mente sunt,
Partisque pars, hujusque pars,	Hi, quos requiris, termini;
In hacque parte quicquid est,	A rebus absunt limites,
Infinitatem continet.	In hisce tantum infinitas,

INFINITAS! INFINITAS!

Proh, quantus heic acervus est!
 Et quam nihil quod nostra mens
 Ex hoc acervo intelligit!
 At illa Mens, vah, qualis est,
 Conspecta cui stant omnia!
 In singulis quæ perspicit
 Quæcunque sunt in singulis
 Et singulorum singulis!”]

* [See Appendix I. (B), for testimonies in regard to the limitation of our knowledge, from the limitation of our faculties.]

II.—PHILOSOPHY OF PERCEPTION.*

(OCTOBER, 1830.)

Œuvres Complètes de THOMAS REID, chef de l'école Ecossaise. Publiées par M. TH. JOUFFROY, avec des Fragments de M. ROYER-COLLARD, et une Introduction de l'Editeur.—Tomes II.—VI. 8vo. Paris, 1828-9, (not completed.)

WE rejoice in the appearance of this work,—and for two reasons. We hail it as another sign of the convalescence of philosophy, in a great and influential nation; and prize it as a seasonable testimony by intelligent foreigners, to the merits of a philosopher, whose reputation is, for the moment, under an eclipse at home.

Apart from the practical corruption, of which (in the emphatic language of Fichte) “the dirt-philosophy” may have been the cause, we regard the doctrine of mind, long dominant in France, as more pernicious, through the stagnation of thought which it occasioned, than for the speculative errors which it set afloat. The salutary fermentation, which the scepticism of Hume determined in Scotland and in Germany, did not extend to that country; and the dogmatist there slumbered on, unsuspecting of his principles, nay even resigned to conclusions, which would make philosophy to man, the solution of the terrific oracle to Œdipus:—

“May'st thou ne'er learn the truth of what thou art!”

“Since the metaphysic of Locke,” says M. Cousin, “crossed the channel, on the light and brilliant wings of Voltaire's imagination; Sensualism has reigned in France, without contradiction, and with an authority of which there is no parallel in the whole

* [In French by M. Peisse; in Italian by S. Lo Gatto; in Crosse's Selections.

Some deletions, found necessary in consequence of the unexpected length to which the Article extended, (especially from the second paragraph on this page, to “contributed,” at the bottom of p. 42), have been restored. Otherwise, I have added little or nothing to this criticism beyond references to my Dissertations supplementary of Reid, when the points under discussion are there more fully or more accurately treated.]

history of philosophy. It is a fact, marvellous but incontestable, that from the time of Condillae, there has not appeared among us any philosophical work, at variance with his doctrine, which has produced the smallest impression on the public mind. Condillac thus reigned in peace; and his domination, prolonged even to our own days, through changes of every kind, pursued its tranquil course, apparently above the reach of danger. Discussion had ceased: his disciples had only to develop the words of their master: philosophy seemed accomplished.”—(*Journal des Savans*, 1819.)

Nor would such a result have been desirable, had the one exclusive opinion been true, as it was false,—innocent, as it was corruptive. If the accomplishment of philosophy imply a cessation of discussion,—if the result of speculation be a paralysis of itself; the consummation of knowledge is only the condition of intellectual barbarism. Plato has profoundly defined man,—“The hunter of truth;” for in this chase, as in others, the *pursuit* is all in all, the *success* comparatively nothing. “Did the Almighty,” says Lessing, “holding in his right hand *Truth*, and in his left *Search after Truth*, deign to proffer me the one, I might prefer;—in all humility but without hesitation, I should request—*Search after Truth*.” We *exist* only as we *energise*; *pleasure* is the reflex of unimpeded energy; energy is the *mean* by which our faculties are developed; and a higher energy the *end* which their development proposes. In *action* is thus contained the existence, happiness, improvement, and perfection of our being; and knowledge is only precious, as it may afford a stimulus to the exercise of our powers, and the condition of their more complete activity. Speculative truth is, therefore, subordinate to speculation itself; and its value is directly measured by the quantity of energy which it occasions,—immediately in its discovery,—mediately through its consequences. Life to Endymion was not preferable to death: aloof from practice, a waking error is better than a sleeping truth. —Neither, in point of fact, is there found any proportion between the *possession* of truths, and the *development* of the mind in which they are deposited. Every *learner* in science, is now familiar with more truths than Aristotle or Plato ever dreamt of knowing; yet, compared with the Stagirite or the Athenian; how few, even of our *masters* of modern science, rank higher than intellectual barbarians! Ancient Greece and modern Europe prove, indeed, that “the march of intellect” is no inseparable concomitant of “the

march of science";—that the cultivation of the individual is not to be rashly confounded with the progress of the species.

But if the possession of theoretical facts be not convertible with mental improvement; and if the former be important only as subservient to the latter; it follows, that the comparative utility of a study is not to be *principally* estimated by the complement of truths which it may communicate; but by the degree in which it determines our higher capacities to action. But though this be the standard by which the different methods, the different branches, and the different masters, of philosophy, *ought* to be *principally* (and it is the *only* criterion by which they *can all* be *satisfactorily*) tried; it is nevertheless a standard, by which, neither methods, nor sciences, nor philosophers, have ever yet been even inadequately appreciated. The critical history of philosophy, in this spirit, has still to be written; and when written, how opposite will be the rank, which, on the higher and more certain standard, it will frequently adjudge,—to the various branches of knowledge, and the various modes of their cultivation,—to different ages, and countries, and individuals, from that which has been hitherto partially awarded, on the vacillating authority of the lower!

On this ground (which we have not been able fully to state, far less adequately to illustrate,) we rest the pre-eminent utility of metaphysical speculations. That they comprehend all the sublimest objects of our theoretical and moral interest;—that every (natural) conclusion concerning God, the soul, the present worth, and the future destiny of man, is exclusively metaphysical, will be at once admitted. But we do not found the importance, on the paramount dignity, of the pursuit. It is as the *best gymnastic of the mind*,—as a mean, principally, and almost exclusively conducive to the highest education of our noblest powers, that we would vindicate to these speculations the necessity, which has too frequently been denied them. By no other intellectual application (and least of all by physical pursuits) is the soul thus reflected on itself, and its faculties concentered in such independent, vigorous, unwonted and continued energy;—by none, therefore, are its best capacities so variously and intensely evolved. "Where there is most life, there is the victory."

Let it not be believed, that the mighty minds which have cultivated these studies, have toiled in vain. If they have not always realised truth, they have always determined exertion; and in the congenial eloquence of the elder Scaliger:—"Eæ subtilitates.

quanquam sint animis otiosis otiosæ atque inutiles; vegetis tamen ingeniis summam cognoscendi afferunt voluptatem,—sitæ, scilicet in fastigio ejus sapientiæ, quæ rerum omnium principia contemplatur. Et quamvis harum indagatio non sit utilis ad machinas farinarias conficiendas; exiit tamen animum inscitæ rubiginæ, acuitque ad alia. Eo denique splendore afficit, ut præluceat sibi ad nanciscendum primi opificis similitudinem. Qui, ut omnia plene ac perfecte est, at præter et supra omnia; ita eos, qui scientiarum studiosi sunt, suos esse voluit, ipsorumque intellectum rerum dominum constituit.”*

The practical danger which has sometimes been apprehended from metaphysical pursuits, has in reality only been found to follow from their stunted and partial cultivation. The poison has grown up; the antidote has been repressed. In Britain and in Germany, where speculation has remained comparatively free, the dominant result has been highly favourable to religion and morals; whilst the evils which arose in France, arose from the benumbing influence of a one effete philosophy; and have, in point of fact, mainly been corrected by the awakened spirit of metaphysical inquiry itself.

With these views, we rejoice, as we said, in the appearance of this translation of the works of Reid—in Paris—and under the auspices of so distinguished an editor as M. Jouffroy, less, certainly, as indicating the triumph of any particular system or school, than as a pledge, among many others, of the zealous yet liberal and nonexclusive spirit, with which the science of mind has of late been cultivated in France. In the history of French philosophy, indeed, the last ten years stand in the most remarkable contrast to the hundred immediately preceding. The state of thralldom in that country during the *century* to one chronic despotism,—perpetuating itself by paralysing speculation, in rendering its objects, objects of disgust,—we have already presented, in a striking passage, written by M. Cousin, towards its conclusion; but a very different picture would await his pencil, were he now to delineate the subsequent progress of that spirit of philosophy, to whose emancipation, recovery, and exaltation, during the *decade*, he has himself so powerfully contributed. The present contrast,

* Bacon himself, the great champion of physical pursuits:—“Non inutiles scientiæ existimandæ sunt, quarum in se nullus est usus, si ingenia acuant et ordinant.”—Hume, Burke, Kant, Stewart, &c., &c., might be quoted to the same effect.—Compare Aristotle, *Metaph.* i. 2; *Eth. Nic.* x. 7.

indeed, which the philosophical enthusiasm of France exhibits to the speculative apathy of Britain, is anything but flattering to ourselves. The new spirit of metaphysical inquiry, which the French imbibed from Germany and Scotland, arose with them precisely at the time when the popularity of psychological researches began to decline with us; and now, when all interest in these speculations seems here to be extinct, they are there seen flourishing, in public favour, with a universality and vigour corresponding to their encouragement.

The only example, indeed, that can be adduced of any interest in such subjects, recently exhibited in this country, is the favourable reception of Dr Brown's *Lectures on the Philosophy of the Mind*. This work, however, we regard as a concurrent cause of the very indifference we lament, and as a striking proof of its reality.

As a cause:—These lectures have certainly done much to justify the general neglect of psychological pursuits. Dr Brown's high reputation for metaphysical acuteness, gave a presumptive authority to any doctrine he might promulgate; and the personal relations in which he stood to Mr Stewart afforded every assurance, that he would not revolt against that philosopher's opinions, rashly, or except on grounds that would fully vindicate his dissent. In these circumstances, what was the impression on the public mind; when all that was deemed best established,—all that was claimed as original and most important in the philosophy of Reid and Stewart, was proclaimed by their disciple and successor to be *naught but a series of misconceptions, only less wonderful in their commission than in the general acquiescence in their truth?* Confidence was at once withdrawn from a pursuit, in which the most sagacious inquirers were thus at fault; and the few who did not relinquish the study in despair, clung with implicit faith to the revelation of the new apostle.

As a proof:—These lectures afford evidence of how greatly talent has, of late, been withdrawn from the field of metaphysical discussion. This work has now been before the world for ten years. In itself it combines many of the qualities calculated to attract public, and even popular, attention; while its admirers have exhausted hyperbole in its praise, and disparaged every philosophic name to exalt the reputation of its author. Yet, though attention has been thus concentrated on these lectures for so long a period, and though the high ability and higher autho-

rity of Dr Brown, deserved and would have recompensed the labour; we are not aware that any adequate attempt has yet been made to subject them, in whole or in part, to an enlightened and impartial criticism. The radical *inconsistencies* which they involve, in every branch of their subject, remain undeveloped; their unacknowledged *appropriations* are still lauded as original; their endless *mistakes*, in the history of philosophy, stand yet uncorrected; and their frequent *misrepresentations* of other philosophers continue to mislead.* In particular, nothing has more convinced us of the general neglect, in this country, of psychological science, than that Brown's ignorant attack on *Reid*, and, through *Reid*, confessedly on *Stewart*, has not long since been repelled;—except, indeed, the general belief that it was triumphant.

In these circumstances, we felt gratified, as we said, with the present honourable testimony to the value of *Reid*'s speculations in a foreign country; and have deemed this a seasonable opportunity of expressing our own opinion on the subject, and of again vindicating, we trust, to that philosopher, the well-earned reputation of which he has been too long defrauded in his own. If we are not mistaken in our view, we shall, in fact, reverse the marvel, and retort the accusation; in proving that Dr Brown himself is guilty of that "series of wonderful misconceptions," of which he so confidently arraigns his predecessors.

"Turpe est doctori, cum culpa redarguit ipsum."

This, however, let it be recollected, is no point of merely per-

* We shall, in the sequel, afford samples of these "inconsistencies," "mistakes," "misrepresentations,"—but not of Brown's "appropriations." To complete the cycle, and vindicate our assertion, we may here adduce one specimen of the way in which discoveries have been lavished on him, in consequence of his omission (excusable, perhaps, in the circumstances) to advertise his pupils when he was not original.—Brown's doctrine of *Generalization*, is identical with that *commonly* taught by philosophers—not Scottish; and, among these, by authors, with whose works his lectures prove him to have been well acquainted. But if a writer, one of the best informed of those who, in this country, have of late cultivated this branch of philosophy, could, among other expressions equally encomiastic, speak of Brown's *return* to the *vulgar* opinion, on such a point, as of "*a discovery &c. which will, in all future ages, be regarded as one of the most important steps ever made in metaphysical science*;" how incompetent must ordinary readers be to place Brown on his proper level,—how desirable would have been a critical examination of his *Lectures*, to distribute to him his own, and to estimate his property at its true value: [See Diss. on *Reid*. pp. 868, 869. *alibi*.]

sonal concernment. It is true, indeed, that either Reid accomplished nothing, or the science has retrograded under Brown. But the question itself regards the cardinal point of metaphysical philosophy; and its determination involves the proof or the refutation of scepticism.

The subject we have undertaken can, with difficulty, be compressed within the limits of a single article. This must stand our excuse for not, at present, noticing the valuable accompaniment to Reid's *Essays on the Intellectual Powers*, in the *Fragments of M. Royer-Collard's Lectures*, which are appended to the third and fourth volumes of the translation. A more appropriate occasion for considering these may, however, occur, when the *first* volume, containing M. Jouffroy's Introduction, appears; of which, from other specimens of his ability, we entertain no humble expectations.

"Reid," says Dr Brown, "considers his confutation of the ideal system as involving almost everything which is truly his. Yet there are few circumstances connected with the fortune of modern philosophy, that appear to me more wonderful, than that a mind like Dr Reid's, so learned in the history of metaphysical science, should have conceived, that on this point, any great merit, at least any merit of originality, was justly referable to him particularly. Indeed, the only circumstance which appears to me wonderful, is, that the claim thus made by him should have been so readily and generally admitted." (*Lect.* xxv. p. 155.)

Brown then proceeds, at great length, to show: 1^o, That Reid, in his attempt to overthrow what he conceived "the common theory of ideas," wholly misunderstood the catholic opinion, which was, in fact, identical with his own, and actually attributed to all philosophers "a theory which had been universally, or, at least, almost universally, abandoned at the time he wrote;" and, 2^o, That the doctrine of perception, which Reid so absurdly fancies he had first established, affords, in truth, no better evidence of the existence of an external world, than even the long abandoned hypothesis which he had taken such idle labour to refute.

In every particular of this statement, Brown is completely, and even curiously, wrong. He is out in his prelude flourish,—out in his serious assault. Reid is neither "so learned in the history of metaphysical science" as he verbally proclaims, nor so sheer an ignorant as he would really demonstrate. Estimated by

aught above a very vulgar standard, Reid's knowledge of Philosophical opinions was neither extensive nor exact; and Mr Stewart was himself too competent and candid a judge, not fully to acknowledge the deficiency.* But Reid's merits as a thinker are too high, and too securely established, to make it necessary to claim for his reputation an erudition to which he himself advances no pretension. And, be his learning what it may, his critic, at least, has not been able to convict him of a *single error*; while Brown himself rarely opens his mouth upon the older authors, without betraying his absolute unacquaintance with the matters on which he so intrepidly discourses.—Nor, as a speculator, does Reid's superiority admit, we conceive, of doubt. With all admiration of Brown's general talent, we do not hesitate to assert, that, in the points at issue between the two philosophers, to say nothing of others, he has *completely misapprehended Reid's philosophy, even in its fundamental position,—the import of the sceptical reasoning,—and the significance of the only argument by which that reasoning is resisted.* But, on the other hand, as Reid can only be defended on the ground of misconception; the very fact, that his great doctrine of Perception could actually be reversed by so acute an intellect as Brown's, would prove that there must exist some *confusion and obscurity* in his own development of that doctrine, to render such a misinterpretation possible. Nor is this presumption wrong. In truth, Reid did not generalise to himself an adequate notion of the various possible *theories of perception*, some of which he has accordingly confounded: while his error of commission in discriminating *consciousness* as a special faculty, and his error of omission in not discriminating *intuitive* from *representative* knowledge,—a distinction without which his peculiar philosophy is naught,—have contributed to render his doctrine of the intellectual faculties prolix, vacillating, perplexed, and sometimes even contradictory.

Before proceeding to consider the doctrine of Perception in relation to the points at issue between Reid and his antagonist, it is therefore necessary to disintegrate the question, by relieving it of these two errors, bad in themselves, but worse in the confusion which they occasion; for, as Bacon truly observes,—“*citius emergit veritas ex errore quam ex confusione.*” And, first, of *consciousness*.

* Dissertation, &c. Part II. p. 197. [In my foot notes to Reid will be found abundant evidence of this deficiency.]

Aristotle, Descartes, Locke, and philosophers in general, have regarded Consciousness, not as a particular faculty, but as the universal condition of intelligence. Reid, on the contrary, following, probably, Hutcheson, and followed by Stewart, Royer-Collard, and others, has classed consciousness as a co-ordinate faculty with the other intellectual powers; distinguished from them, not as the species from the individual, but as the individual from the individual. And as the particular faculties have each their peculiar object, so the peculiar object of consciousness is, the *operations of the other faculties themselves, to the exclusion of the objects about which these operations are conversant.*

This analysis we regard as false. For it is impossible: in the *first* place, to discriminate consciousness from all the other cognitive faculties, or to discriminate any one of these from consciousness; and, in the *second*, to conceive a faculty cognisant of the various mental operations, without being also cognisant of their several objects.

We know; and *We know that we know*:—these propositions, logically distinct, are really identical; each implies the other. *We know* (i. e. feel, perceive, imagine, remember, &c.) only as we *know that we thus know*; and we *know that we know*, only as we know in *some particular manner*, (i. e. feel, perceive, &c.) So true is the scholastic brocard:—“*Non sentimus nisi sentiamus nos sentire; non sentimus nos sentire nisi sentiamus.*”—The attempt to analyse the cognition *I know*, and the cognition *I know that I know*, into the separate energies of distinct faculties, is therefore vain. But this is the analysis of Reid. Consciousness, which the formula *I know that I know* adequately expresses, he views as a power specifically distinct from the various cognitive faculties comprehended under the formula *I know*, precisely as these faculties are severally contradistinguished from each other. But here the parallel does not hold. I can feel without perceiving, I can perceive without imagining, I can imagine without remembering, I can remember without judging (in the emphatic signification), I can judge without willing. One of these acts does not immediately supposit the other. Though modes merely of the same indivisible subject, they are modes in relation to each other, really distinct, and admit, therefore, of psychological discrimination. But can I feel without being conscious that I feel?—can I remember, without being conscious that I remember? or, can I be conscious, without being conscious that I perceive, or imagine,

or reason,—that I enorgise, in short, in some determinate mode, which Reid would view as the act of a faculty specifically different from consciousness? That this is impossible, Reid himself admits. “Unde,” says Tertullian,—“unde ista tormenta cruciandæ simplicitatis et suspendendæ veritatis? Quis mihi exhibebit Sensum non intelligentem se sentire?”—But if, on the one hand, consciousness be only realised under specific modes, and cannot therefore exist apart from the several faculties *in cumulo*; and if, on the other, these faculties can all and each only be exerted under the condition of consciousness; consciousness, consequently, is not one of the special modes into which our mental activity may be resolved, but the fundamental form,—the generic condition of them all. Every intelligent act is thus a modified consciousness; and consciousness a comprehensive term for the complement of our cognitive energies.

But the vice of Reid’s analysis is further manifested in his arbitrary limitation of the sphere of consciousness; proposing to it the various intellectual operations, but excluding their objects. “I am conscious,” he says, “of perception, but not of the object I perceive; I am conscious of memory, but not of the object I remember.”

The reduction of consciousness to a particular faculty entailed this limitation. For, once admitting consciousness to be cognisant of *objects* as of *operations*, Reid could not, without absurdity, degrade it to the level of a special power. For thus, in the *first* place, consciousness coextensive with *all* our cognitive faculties, would yet be made co-ordinate with *each*: and, in the *second*, two faculties would be supposed to be simultaneously exercised about the same object, to the same intent.

But the alternative which Reid has chosen is, at least, equally untenable. The assertion, that we can be conscious of an act of knowledge, without being conscious of its object, is virtually suicidal. A mental operation is only what it is, by relation to its object; the object at once determining its existence, and specifying the character of its existence. But if a relation cannot be comprehended in one of its terms, so we cannot be conscious of an operation, without being conscious of the object to which it exists only as correlative.* For example, We are conscious of a

* [I have great pleasure, in confirmation of this doctrine, to make the following quotation from a work, wholly unknown, it would appear, in

perception, says Reid, but are not conscious of its object. Yet how can we be conscious of a *perception*, that is, how can we *know* that a perception exists,—that it is a perception, and not another mental state,—and that it is the perception of a rose, and of nothing but a rose; unless this *consciousness* involve a knowledge (or consciousness) of the object, which at once determines the existence of the act,—specifies its kind,—and distinguishes its individuality? Annihilate the object, you annihilate the operation; annihilate the consciousness of the object, you annihilate the consciousness of the operation. In the greater number indeed of our cognitive energies, the two terms of the relation of knowledge exist only as identical; the object admitting only of a logical discrimination from the subject. I imagine a Hippogryph. The Hippogryph is at once the object of the act and the act itself. Abstract the one, the other has no existence: deny me the consciousness of the Hippogryph, you deny me the consciousness of the imagination; I am conscious of zero; I am not conscious at all.

A difficulty may here be started in regard to two faculties,—*Memory* and *Perception*.

Memory is defined by Reid “an *immediate* knowledge of the *past* ;” and is thus distinguished from consciousness, which, with all philosophers, he views as “an *immediate* knowledge of the *present*.” We may therefore be conscious of the act of *Memory as present*, but of its object *as past*, consciousness is impossible. And certainly, if Reid’s definition of memory be admitted, this inference cannot be disallowed. But memory is not an immediate knowledge of the past; an *immediate knowledge of the past* is a contradiction in terms. This is manifest, whether we look *from the act to the object*, or *from the object to the act*.—To be known

Britain, but which manifests, throughout, singular ingenuity and independence:—I mean the treatise entitled—“Two dissertations concerning Sense, and the Imagination, with an essay on Consciousness;” London, 1728, for Tonson, and an octavo of 231 pages. I may find a more fitting opportunity of doing justice to the author (Zachary Mayne?). After stating, that—“Consciousness and the Understanding do mutually infer one another,” he says *inter alia*:—“The Understanding, therefore, considered as a conscious faculty, is like an universal sense, which perceives and takes cognisance of the perceptions [apprehensions] of all the mind’s faculties and powers, and of their other acts and operations: and consequently of their objects; there being no possibility of separating the object, or thing perceived, from the act of perceiving.” P. 167.]

immediately, an *object* must be known *in itself*; to be known in itself, it must be known as actual, now existent, *present*. But the object of memory is *past*—not present, not now existent, not actual; it cannot therefore be known in itself. If known at all, it must be known in something different from itself; i. e. *mediately*; and memory as an “*immediate knowledge of the past*,” is thus impossible.—Again: memory is an *act* of knowledge; an act exists only as present; and a present knowledge can be immediately cognisant only of a present object. But the object known in memory is *past*; consequently, either memory is not an *act* of knowledge at all, or the object immediately known is present; and the past, if known, is known only through the *medium* of the *present*; on either alternative memory is not “an *immediate knowledge of the past*.” Thus, memory, like our other faculties, affords only an immediate knowledge of the present; and, like them, is nothing more than consciousness variously modified.*

In regard to *Perception*: Reid allows an *immediate knowledge* of the affections of the subject of thought, mind, or *self*, and an *immediate knowledge* of the qualities of an object really different from self—*matter*. To the former, he gives the name of *Consciousness*, to the latter, that of *Perception*. Is Consciousness, as an immediate knowledge, *purely subjective*, not to be discriminated from Perception, as an immediate knowledge, *really objective*?—A logical difference we admit; a psychological we deny.

Relatives are known only together: the science of opposites is one. Subject and object, mind and matter, are known only in correlation and contrast,—and by the same common act: while knowledge, as at once a synthesis and an antithesis of both, may

* The only parallel we know to this misconception of Reid's is the opinion on which Fromondus animadverts. “In primis displicet nobis plurimorum recentiorum philosophia, qui sensuum interiorum operationes, ut phantasiationem, memoratorem, et remuiscientiam, circa imagines, recenter aut olim spiritibus vel cerebro impressas, versari negant; sed proxime circa objecta quæ foris sunt. Ut cum quis meminit se vidisse leporem currentem; memoria, inquit, non intuetur et attingit imaginem leporis in cerebro asservatam, sed solum leporem ipsum qui cursu trajiciebat campum, &c. &c.” (Philosophia Christiana de Anima. Lovanii, 1649. L. III. c. 8. art. 8.) Who the advocates of this opinion were, we are ignorant; but more than suspect that, as stated, it is only a misrepresentation of the Cartesian doctrine, then on the ascendant. [Lord Monboddo has, however, a doctrine of the sort. But see Dissertations on Reid, p. 814. sq.]

be indifferently defined an antithetic synthesis, or a synthetic antithesis of its terms. Every conception of self, necessarily involves a conception of not-self: every perception of what is different from me, implies a recognition of the percipient subject in contradistinction from the object perceived. In one act of knowledge, indeed, the object is the prominent element, in another the subject; but there is none in which either is known out of relation to the other. The immediate knowledge which Reid allows of things different from the mind, and the immediate knowledge of mind itself, cannot therefore be split into two distinct acts. In Perception, as in the other faculties, the same indivisible consciousness is conversant about both terms of the relation of knowledge. Distinguish the cognition of the subject from the cognition of the object of Perception, and you *either* annihilate the relation of knowledge itself, which exists only in its terms being comprehended together in the unity of consciousness; *or* you must postulate a higher faculty, which shall again reduce to one, the two cognitions you have distinguished;—that is, you are at last compelled to admit, in an unphilosophical complexity, that common consciousness of subject and object, which you set out with denying in its philosophical simplicity. *Consciousness* and *immediate knowledge* are thus terms universally convertible; and if there be an immediate knowledge of things external, there is consequently the *Consciousness of an outer world*.*

* How correctly Aristotle reasoned on this subject, may be seen from the following passage:—"When we perceive (*αἰσθασόμεθα*)"—the earlier Greeks, perhaps fortunately, had no special term for *consciousness*—"when we perceive that we see, hear, &c. it is necessary, that by sight itself we perceive that we see, or by another sense. If by another sense, then this also must be a sense of sight, conversant equally about the object of sight, colour. Consequently, there must either be two senses of the same object, or every sense must be percipient of itself. Moreover, if the sense percipient of sight be different from sight itself, it follows, either that there is a regress to infinity, or we must admit, at last, some sense percipient of itself; but if so, it is more reasonable to admit this in the original sense at once." (*De Anima*, L. iii, c. 2. text. 136.) Here Aristotle ought not to be supposed to mean that every sense is an independent faculty of perception, and, as such, conscious of itself. Compare *De Somno et Vigila*, c. 2. and *Problemata* (if indeed his) sect. xi. § 33. His older commentators—Alexander, Themistius, Simplicius—follow their master. Philoponus and Michael Ephesinus desert his doctrine, and attribute this self-consciousness to a peculiar faculty which they call Attention (*τὸ προσεκτικόν*.) This is the earliest example we know of this false analysis, which, when carried to its last absurdity, has given us

Reid's erroneous analysis of Consciousness is not perhaps of so much importance in itself, as from causing confusion in its consequences. Had he employed this term as tantamount to immediate knowledgo in general, whether of self or not, and thus *distinctly expressed* what he *certainly* [?] *taught*, that mind and matter are both equally known to us *as existent and in themselves*; Brown could hardly have so far misconceived his doctrine, as actually to lend him the very opinion which his whole philosophy was intended to refute; viz. that an *immediate*, and consequently a *real*, knowledge of external things is impossible. But this by anticipation.

This leads us to the *second* error,—the non-distinction of *representative* from *presentative* or *intuitive* knowledge. [See Dissertations on Reid, p. 804—815.] The reduction of consciousness to a special faculty involved this confusion. For had Reid perceived that all our faculties are only consciousnesses, and that Consciousness as an immediate knowledge is only of the present and actual, he would also have discovered that the *past* and *possible*, either could not be known to us at all, or could be known only *in* and *through* the present and actual, i. e. *mediately*. But a mediate knowledgo is necessarily a *representative* knowledge. For if the present, or actual *in* itself, makes known to us the past and possible *through* itself, this can only be done by a vicarious substitution or representation. And as the knowledge of the *past* is given in *Memory*, (using that term in its vulgar universality) and that of the *possible* in *Imagination*, these two faculties are powers of representative knowledge. Memory is an immediate knowledge of a *present* thought, involving an absolute belief that this thought represents another act of knowledge that *has been*. Imagination (which we use in its widest signification, to include conception or simple apprehension) is an immediate knowledge of an *actual* thought, which, as not subjectively self contradictory, (i. e. logically possible), involves the hypothetical belief that it objectively *may be* (i. e. is really possible).

consciousness, and *attention*, and *reflection*, as distinct powers. Of the schoolmen, *sotius est silere, quam parum dicere*. Nemesius, and Plutarchus of Athens preserved by Philoponus, accord this reflex consciousness to *intellect* as opposed to *sense*. Plato varies in his Theætetus and Charmides.—Some, however, of the Greek commentators on Aristotle, as I have elsewhere observed, introduced the term *ὑποστροφή*, employing it, by extension, for consciousness in general.

Nor is philosophy here at variance with nature. The learned and unlearned agree, that in Memory and Imagination, naught of which we are conscious lies beyond the sphere of self, and that in these acts the *object known is only relative to a reality supposed to be*. Nothing but Reid's superstitious horror of the ideal theory, could have blinded him so far, as not to see that these faculties are, of necessity, mediate and representative. In this, however, he not only over-shot the truth, but almost frustrated his whole philosophy. For, he thus affords a ground (and the only ground, though not perceived by Brown), on which it could be argued that his doctrine of perception was *not intuitive*—was *not presentative*. For if he reject the doctrine of ideas not less in Memory and Imagination, which *must* be representative faculties, than in perception, which *may* be intuitive, and if he predicate *immediate knowledge* equally of all;—it can plausibly be contended, in favour of Brown's conclusion, that Reid did not really intend to allow a proper intuitive or presentative Perception, and that he only abusively gave the name of immediate knowledge to the simplest form of the representative theory, in contradistinction to the more complex. But this also by anticipation.

There exists, therefore, a distinction of knowledge,—as *immediate, intuitive, or presentative*, and as *mediate or representative*.—The former is logically *simple*, as only contemplative: the latter logically complex, as both representative, and contemplative of the representation.—In the one, the *object is single*, and the word univocal: in the other it is double, and the term equivocal; the object known and representing, being different from the object unknown and represented.—The knowledge in an intuitive act, as convertible with existence, is *assertory*; and the reality of its *only* object is given unconditionally, as a *fact*: the knowledge in a representative act, as not convertible with existence, is *problematical*; and the reality of its principal object is given hypothetically, as an *inference*.—Representative knowledge is purely *subjective*, for its object known is always *ideal*; presentative may be either subjective or objective, for its one object may be either mental or material.—Considered in *themselves*: an intuitive cognition is complete, as absolute and irrespective of aught beyond the compass of knowledge; a representative incomplete, as relative to a transcendent something, beyond the sphere of consciousness.—Considered in relation to their *objects*: the former is complete, its object being known and real; the latter incomplete, its object

known, being unreal, and its real object unknown.—Considered in relation to *each other*: immediate knowledge is complete, as all sufficient in itself; mediate incomplete, as realized only through the other.*

So far there is no difficulty, or ought to have been none. The past and possible can only be known mediately by representation. But a more arduous, at least a more perplexed, question arises, when we ask:—Is all knowledge of the present or actual intuitive? *Is the knowledge of mind and matter equally immediate?*

In regard to the immediate knowledge of *mind*, there is *now* at least no difficulty; it is admitted not to be representative. The problem, therefore, exclusively regards the intuitive perception of the qualities of *matter*.

(To obviate misapprehension, we may here parenthetically observe, that all we *do* intuitively know of self,—all that we *may* intuitively know of not-self, is only *relative*. Existence *absolutely and in itself*, is to us as zero; and while nothing *is*, so nothing is *known* to us, except those phases of being which stand in analogy to our faculties of knowledge. These we call *qualities, phenomena, properties, &c.* When we say, therefore, that a thing is *known in itself*, we mean only, that it stands face to face, in direct and immediate relation to the conscious mind; in other words, that, *as existing*, its phenomena form part of the circle of our knowledge,—exist, *since* they are known, and are known, *because* they exist.)

If we interrogate Consciousness concerning the point in question, the response is categorical and clear. When I concentrate

* This distinction of intuitive or presentative and of representative knowledge, overlooked, or rather abolished, in the theories of modern philosophy, is correspondent to the division of knowledge by certain of the schoolmen, into *intuitive* and *abstractive*. By the latter term, they also expressed *abstract* knowledge in its present signification,—“*Cognitio intuitiva*,” says the *Doctor Resolutissimus*, “est illa quæ immediate tendit ad rem sibi *præsentem* objective, *secundum ejus actualem existentiam*; sicut cum video colorem existentem in pariete, vel rosam, quam in manu teneo. *Abstractiva*, dicitur omnis cognitio, quæ habetur de re *non sic realiter præsentem* in ratione objecti *immediate* cogniti.” Now, when with a knowledge of this distinction of which Reid was ignorant, and rejecting equally with him not only species, but a representative perception, we say that *many of the schoolmen* have, in this respect, left behind them all modern philosophers; we assert a paradox, but one which we are easily able to prove. Leibnitz spoke truly, when he said—“*Aurum latere in stercore illo scholastico barbarici*.” [See Diss. on Reid, pp. 804–815.]

my attention in the simplest act of Perception, I return from my observation with the most irresistible conviction of *two* facts, or rather, two branches of the *same* fact;—that *I am*,—and that *something different from me exists*. In this act, I am conscious of myself as the perceiving *subject*, and of an external reality as the *object* perceived; and I am conscious of both existences in the same indivisible moment of intuition. The knowledge of the subject does not precede nor follow the knowledge of the object;—neither determines, neither is determined by, the other. The two terms of correlation stand in mutual counterpoise and equal independence; they are given as connected in the synthesis of knowledge, but as contrasted in the antithesis of existence.

Such is the fact of Perception revealed in Consciousness, and as it determines mankind in general in their equal assurance of the reality of an external world, and of the existence of their own minds. *Consciousness declares our knowledge of material qualities to be intuitive*. Nor is the fact, *as given*, denied even by those who disallow its truth. So clear is the deliverance, that even the philosophers (as we shall hereafter see) who reject an intuitive perception, find it impossible not to admit, that their doctrine stands decidedly opposed to the voice of consciousness and the natural conviction of mankind. [This doctrine is, however, to be asserted, only in subordination to the distinction of the *Primary, Secundo-primary, and Secondary Qualities of Matter*. See Diss. on Reid, p. 845–874.]

According as the truth of the fact of consciousness in perception is *entirely* accepted, accepted *in part*, or *wholly* rejected, *six* possible and actual systems of philosophy result. We say explicitly—the *truth* of the fact. For the fact, as a phenomenon of consciousness, cannot be doubted; since to doubt that we are conscious of this or that, is impossible. The doubt, as itself a phenomenon of consciousness, would annihilate itself. [See Diss. on Reid, p. 816–819.]

1. If the veracity of Consciousness be unconditionally admitted,—if the intuitive knowledge of mind and matter, and the consequent reality of their antithesis be taken as truths, to be explained if possible, but in themselves are held as paramount to all doubt, the doctrine is established which we would call the scheme of *Natural Realism* or *Natural Dualism*.—2. If the veracity of Consciousness be allowed to the equipoise of the object and subject in the act, but rejected as to the reality of their antithesis, the

system of *Absolute Identity* emerges, which reduces both mind and matter to phænomenal modifications of the same common substance.—3 and 4. If the testimony of Consciousness be refused to the co-originality and reciprocal independence of the subject and object, two schemes are determined, according as the one or the other of the terms is placed as the original and genetic. Is the object educed from the subject, *Idealism*; is the subject educed from the object, *Materialism*, is the result.—5. Again, is the Consciousness itself recognised only as a phænomenon, and the substantial reality of both subject and object denied, the issue is *Nihilism*. [Compare *infra*, Art. VI., Philosophy; also Diss., pp. 816–819.]

6. These systems are all conclusions from an original interpretation of the fact of Consciousness in Perception, carried intrepidly forth to its legitimate issue. But there is one scheme, which, violating the integrity of this fact, and, with the complete idealist, regarding the object of Consciousness in Perception as only a modification of the percipient subject, or, at least, a phænomenon numerically different from the object it represents,—endeavours, however, to stop short of the negation of an external world, the reality of which, and the knowledge of whose reality, it seeks by various hypotheses, to establish and explain. This scheme, which we would term *Cosmothetic Idealism*, *Hypothetical Realism* or *Hypothetical Dualism*,—although the most inconsequent of all systems, has been embraced, under various forms, by the immense majority of philosophers.

Of these systems, Brown adheres to the last. He holds that the mind *is conscious or immediately cognisant of nothing beyond its subjective states*; but he assumes the existence of an external world beyond the sphere of consciousness, exclusively on the ground of our irresistible belief in its unknown reality. Independent of this belief, there is no reasoning on which the existence of matter can be vindicated; the logic of the idealist he admits to be unassailable.

But Brown not only embraces the scheme of Hypothetical Realism himself, he never suspects that Reid entertained any other doctrine. Brown's transmutation of Reid from a *natural* to a *hypothetical* realist, as a misconception of the grand and distinctive tenet of a school, by one even of its disciples, is without a parallel in the whole history of philosophy: and this portentous error is prolific; *Chimæra chimæram parit*. Were the evidence

of the mistake less unambiguous, we should be disposed rather to question our own perspicacity, than to tax so subtle an intellect with so gross a blunder.

Before establishing against his antagonist the true opinion of Reid, it will be proper first to generalize the *possible forms, under which the hypothesis of a representative perception* can be realised, as a confusion of some of these as actually held, on the part both of Reid and Brown, has tended to introduce no small confusion into the discussion.

The Hypothetical Realist contends, that he is wholly ignorant of *things in themselves*, and that these are known to him, only through a vicarious phenomenon, of which he is conscious in perception ;

“*Rerumque ignarus, Imagine gaudet.*”

In other words, that the object immediately known and representing is numerically different from the object really existing and represented.—Now this vicarious phenomenon, or immediate object, must *either* be numerically different from the percipient intellect, *or* a modification of that intellect itself. If the latter, it must, again, *either* be a modification of the thinking substance, with a transcendent existence beyond the act of thought, *or* a modification identical with the act of perception itself.

All possible forms of the representative hypothesis are thus reduced to three, and these have all been actually maintained.

I. THE REPRESENTATIVE OBJECT NOT A MODIFICATION OF MIND.

II. THE REPRESENTATIVE OBJECT A MODIFICATION OF MIND, DEPENDENT FOR ITS APPREHENSION, BUT NOT FOR ITS EXISTENCE, ON THE ACT OF CONSCIOUSNESS.

III. THE REPRESENTATIVE OBJECT A MODIFICATION OF MIND, NON-EXISTENT OUT OF CONSCIOUSNESS;—THE IDEA AND ITS PERCEPTION ONLY DIFFERENT RELATIONS OF AN ACT (STATE) REALLY IDENTICAL.

In the *first*, the various opinions touching the nature and origin of the representative object ; whether material, immaterial, or between both ; whether physical or hyperphysical ; whether propagated from the external object or generated in the medium ; whether fabricated by the intelligent soul or in the animal life ; whether infused by God, or angels, or identical with the divine substance :—these afford in the history of philosophy so many subordinate modifications of this form of the hypothesis.—In the

two latter, the subaltern theories have been determined by the difficulty to connect the representation with the reality, in a relation of causal dependence; and while some philosophers have left it altogether unexplained (Neoplatonists), the others have been compelled to resort to the hyperphysical theories of divine assistance (Cartesians), or of a pre-established harmony (Leibnitians).—Under the *second*, opinions have varied, whether the representative object be innate or factitious. [See Diss. p. 817–819.]

The *third* of these forms of representation Reid does not seem to have understood. The illusion which made him view, in his doctrine, Memory and Imagination as powers of *immediate* knowledge, though only *representative* faculties, under the *third* form, has, in the history of opinions regarding Perception, puzzled him, as we shall see, in his exposition of the doctrine of Arnauld. He was not aware that there was a theory, neither identical with an intuitive Perception, nor with the *first* or *second* form of the representative hypothesis; with both of which he was sufficiently acquainted.—Brown, on the contrary, who adopts the *third* and simplest modification of that hypothesis, appears ignorant of its discrimination from the *second*; and accordingly views the philosophers who held this latter form, as not distinguished in opinion from himself. Of the doctrine of *intuition* he does not seem almost to have conceived the possibility.

These being premised, we proceed to consider the greatest of all Brown's errors, in itself and in its consequences,—his misconception of the cardinal position of Reid's philosophy, in supposing that philosopher as a *hypothetical* realist, to hold with himself the *third* form of the *representative* hypothesis, and not, as a *natural* realist, the doctrine of an *intuitive* Perception. We are compelled to be brief; and to complete the evidence of the following proof (if more indeed be required), we must beg our readers, interested in the question, to look up the passages, to which we are able only to refer. [See Diss. on Reid, p. 819–824. The pages of the original editions here referred to are there marked.]

In the *first* place, *knowledge* and *existence* are then only convertible when the reality is known *in itself*; for then only can we say, that it is known *because* it exists, and exists *since* it is known. And this constitutes an *immediate*, *presentative*, or *intuitive* cognition, rigorously so called.—Nor did Reid contemplate any other. 'It seems admitted,' he says, 'as a first principle, by the learned and the unlearned, that *what is really perceived must*

'*exist*, and that to *perceive what does not exist is impossible*. So 'far the unlearned man and the philosopher agree.'—(Essays on the Intellectual Powers, p. 142.)

In the *second* place, philosophers agree, that the *idea* or representative object in their theory, is in the strictest sense *immediately perceived*.—And so Reid understands them. 'I perceive not, says the Cartesian, the external object itself; (so far he agrees with the Peripatetic, and differs from the unlearned man;) but I perceive an image, or form, or idea, in my own mind, or in my brain. *I am certain of the existence of the idea; because I immediately perceive it.*' (L. c.)

In the *third* place, philosophers concur in acknowledging, that mankind at large believe, that the *external reality itself* constitutes the *immediate and only object of perception*—So also Reid. 'On the same principle, the unlearned man says, *I perceive the external object, and I perceive it to exist.*' (L. c.)—'The vulgar undoubtedly believe, that it is the *external object* which we *immediately perceive*, and not a representative image of it only. It is for this reason, that they look upon it as *perfect lunacy to call in question the existence of external objects.*' (L. c.)—'The vulgar are firmly persuaded, that the *very identical objects which they perceive* continue to exist when they do not perceive them; and are no less firmly persuaded, that when ten men look at the sun or the moon they all see the same individual object.' (P. 166.)—Speaking of Berkeley: 'The vulgar opinion he reduces to this, that the *very things which we perceive* by our senses do *really exist*. This he grants.' (P. 165.)—'It is therefore acknowledged by this philosopher (Hume) to be a natural instinct or prepossession, an universal and primary opinion of all men, that the objects which we *immediately perceive*, by our senses, are *not images in our minds*, but *external objects*, and that their existence is independent of us and our perception.' (P. 201. See also pp. 143, 198, 199, 200, 206.)

In these circumstances, if Reid: either 1°,—maintains, that his immediate perception of external things is convertible with their reality; or 2°,—asserts that, in his doctrine of perception, the external reality stands, to the percipient mind, face to face, in the same immediacy of relation which the idea holds in the representative theory of the philosophers; or 3°,—declares the identity of his own opinion with the vulgar belief, as thus expounded by himself and the philosophers:—he could not more emphatically

proclaim himself a *natural realist*, and his doctrine of perception, as intended, at least, a *doctrine of intuition*. And he does *all three*.

The first and second.—‘We have before examined the reasons ‘given by philosophers to prove that ideas, and not external ‘objects, are the immediate objects of perception. We shall only ‘here observe, THAT IF EXTERNAL OBJECTS BE PERCEIVED IMMEDIATELY,’ [and he had just before asserted for the hundredth time that they were so perceived] ‘WE HAVE THE SAME REASON ‘TO BELIEVE THEIR EXISTENCE, AS PHILOSOPHERS HAVE TO BELIEVE THE EXISTENCE OF IDEAS, WHILE THEY HOLD THEM TO ‘BE THE IMMEDIATE OBJECTS OF PERCEPTION.’ (P. 589. See also pp. 118, 138.)

The third.—Speaking of the perception of the external world—‘We have here a remarkable conflict between two contradictory ‘opinions, wherein all mankind are engaged. On the one side ‘stand *all the vulgar*, who are unpractised in philosophical ‘researches, and guided by the uncorrupted primary instincts of ‘nature. On the other side, stand *all the philosophers, ancient ‘and modern; every man, without exception, who reflects*. IN THIS ‘DIVISION, TO MY GREAT HUMILIATION, I FIND MYSELF CLASSED ‘WITH THE VULGAR.’ (P. 207.)

Various other proofs of the same conclusion, could be adduced; these for brevity we omit.—Brown’s interpretation of the fundamental tenet of Reid’s philosophy, is therefore, not a simple misconception, but an absolute reversal of its real and even unambiguous import. [This is too strong. See Diss. p. 820.]

But the ground, on which Brown vindicates his interpretation, is not unworthy of the interpretation itself. The possibility of an intuition beyond the sphere of self, he can hardly be said to have contemplated; but on one occasion, Reid’s language seems, for a moment, to have actually suggested to him the question:—Might that philosopher not possibly regard the material object, as identical with the object of consciousness in perception?—On what ground does he reject the affirmative as absurd? His reasoning is to this effect:—*To assert an intuitive perception of matter, is to assert an identity of matter and mind, (for an immediacy of knowledge is convertible with a unity of existence); But Reid was a sturdy dualist; Therefore, he could not maintain an immediate perception of the qualities of matter.* (Lect. xxv. pp. 159, 160.) In this syllogism, the major is a mere *petitio principii*, which

Brown has not attempted to prove; and which, as tried by the standard of all philosophical truth, is not only false, but even the reverse of the truth; while, admitting its accuracy, it cannot be so connected with the minor, as to legitimate the conclusion.

If we appeal to Consciousness, consciousness gives, even in the last analysis,—in the unity of knowledge, a *duality of existence*; and peremptorily falsifies Brown's assumption, that *not-self, as known, is identical with self as knowing*. Reid therefore, as a dualist, and on the suprema authority of consciousness, might safely maintain the immediacy of perception;—nay, as a dualist Reid *could not*, consistently, have adopted the opinion which Brown argues, that, as a dualist, he *must* be regarded to have held. Mind and matter exist to us only in their qualities: and these qualities exist to us only as they are known by us, *i. e.*, as phenomena. It is thus merely from *knowledge* that we can infer *existence*, and only from the supposed repugnance or compatibility of *phenomena*, within our experience, are we able to ascend to the transcendent difference or identity of *substances*. Now, on the hypothesis that all we immediately know, is only a state or modification or quality or phenomenon of the cognitive subject itself,—how can we contend, that the phenomena of mind and matter, *known* only as modifications of the *same*, must be the modifications of *different substances*;—nay, that only on this hypothesis of their substantial unity in knowledge, can their substantial duality in existence be maintained? But of this again.

Brown's assumption has no better foundation than the exaggeration of a crotchet of philosophers; which, though contrary to the evidence of Consciousness, and consequently not only *without* but *against* all evidence, has yet exerted a more extensive and important influence, than any principle in the whole history of philosophy. This subject deserves a volume; we can only afford it a few sentences.—Some philosophers (as Anaxagoras, Heraclitus, Demæon) maintained that knowledge implied even a *contrariety* of subject and object. But since the time of Empedocles, no opinion has been more universally admitted, than that the *relation of knowledge* inferred an *analogy of existence*. This analogy may be supposed in two potences. What knows and what is known, are either, 1°, *similar*, or, 2°, the *same*; and if the general principle be true, the latter is the more philosophical. This principle it was, which immediately determined the whole doctrine of a representative perception. Its lower potency

is seen in the *intentional species* of the schools, and in the *ideas* of Malebranche and Berkeley ; its higher in the *gnostic reasons* of the Platonists, in the *pre-existing species* of Avicenna and the Arabians, in the *ideas* of Descartes and Leibnitz, in the *phenomena* of Kant, and in the *external states* of Brown. It mediately determined the *hierarchical gradation of faculties or souls* of the Aristotelians,—the *vehicular media* of the Platonists,—the theories of a *common intellect* of Alexander, Themistius, Averroes, Cajetanus, and Zabarella,—the *vision in the deity* of Malebranche,—the Cartesian doctrine of *assistance*,—the *predetermined harmony* of Leibnitz,—and the *plastic medium* of More and Cudworth. To no other origin is to be ascribed *refusal of the fact of consciousness in its primitive duality* ; and the unitarian systems of *identity, materialism, idealism*, are the result.

But however universal and omnipotent this principle may have been, Reid was at once too ignorant of opinions, to be much in danger from authority, and too independent a thinker, to accept so baseless a fancy as a fact. "Mr Norris," says he, "is the only author I have met with who professedly puts the question, Whether material things can be perceived by us *immediately* ? He has offered four arguments to show that they cannot. First, Material objects are without the mind, and therefore there can be no union between the object and the percipient. Answer—This argument is lame, until it is shown to be necessary, that in perception there should be an union between the object and the percipient. Second, *material objects are disproportioned to the mind, and removed from it by the whole diameter of Being.*—This argument I cannot answer, because *I do not understand it.*" (Essays, I. P. p. 202.)

The principle, that the relation of knowledge implies an analogy of existence, admitted without examination in almost every school, but which Reid, with an ignorance wiser than knowledge, confesses he does not understand ; is nothing more than an irrational attempt to explain, what is, in itself, inexplicable. How the similar or the same is conscious of itself, is not a whit less inconceivable, than how one contrary is immediately percipient of another. It at best only removes our admitted ignorance, by one step back ; and then, in place of our knowledge simply originating from the *incomprehensible*, it ostentatiously departs from the *absurd*.

The slightest criticism is sufficient to manifest the futility of

that hypothesis of representation, which Brown would substitute for Reid's presentative perception;—although this hypothesis, under various modifications, be almost coextensive with the history of philosophy. In fact, it fulfils none of the conditions of a *legitimate* hypothesis.

In the *first* place, it is *unnecessary*.—It cannot show, that the fact of an intuitive Perception, as given in Consciousness, ought not to be accepted; it is unable therefore to vindicate its own necessity, in order to explain the possibility of our knowledge of external things.—That we cannot show forth, *how* the mind is capable of knowing something different from self, is no reason to doubt *that* it is so capable. Every *how* (ὅτι) rests ultimately on a *that* (ὅτι); every demonstration is deduced from something *given* and *indemonstrable*; all that is comprehensible, hangs from some *revealed** *fact*, which we *must believe as actual*, but, *cannot construe to the reflective intellect in its possibility*. In consciousness,—in the original spontaneity of intelligence (νοῦς, *locus principiorum*), are revealed the primordial facts of our intelligent nature. Consciousness is the fountain of all comprehensibility and illustration; but *as such*, cannot be itself illustrated or comprehended. To ask how any fact of consciousness is possible, is to ask how consciousness itself is possible; and to ask how consciousness is possible, is to ask how a being intelligent like man is possible. Could we answer this, the Serpent had not tempted Eve by an hyperbole:—"We should be as Gods." But as we did not create ourselves, and are not even in the secret of our creation; we must take our existence, our knowledge *upon trust*: and that philosophy is the only true, because in it alone *can* truth be realised, which does not revolt against the *authority* of our natural *beliefs*.

"The voice of Nature is the voice of God."

To ask, therefore, a *reason* for the possibility of our intuition of external things, above the *fact* of its reality, as given in our perceptive consciousness, betrays, as Aristotle has truly said, an *imbecility of the reasoning principle itself*:—"Τούτου ζήτησις λόγου

* [This expression is not meant to imply anything hyperphysical. It is only used to denote the ultimate and incomprehensible nature of the fact;—of the fact which must be believed though it cannot be understood, cannot be explained.—Dr Reid employs the term *revelation* in a mystical and objectionable sense. On the proper and improper use of the term, see *Dissertations on Reid*, pp. 761, 794, 820, 821, &c.]

αἴτινα; τὴν αἰσθῆσιν, ἀβυστία τίς ἐστι διανοίας." The natural realist, who accepts this intuition, cannot, certainly, explain it, because, as ultimate, it is a fact inexplicable. Yet, with Hudibras:—

"He knows *what's what*; and that's as high
As metaphysic wit can fly."

But the Hypothetical Realist—the Cosmothetic Idealist, who rejects a consciousness of aught beyond the mind, cannot require of the Natural Realist an explanation of how such a consciousness is possible, until he himself shall have explained, what is even less conceivable, the possibility of *representing* (i. e. of *knowing*) the *unknown*. Till then, each founds on the *incomprehensible*; but the former admits the voracity, the latter postulates the falsehood of that principle, which can alone confer on this incomprehensible foundation the character of truth. The Natural Realist, whose watchword is—*The facts of consciousness, the whole facts, and nothing but the facts*, has therefore naught to fear from his antagonist, so long as consciousness cannot be explained nor redargued from without. If his system be to fall, it falls only with philosophy; for it can only be disproved, by proving the mendacity of consciousness—of that faculty,

"Quæ nisi sit veri, ratio quoque falsa fit omnis,"
("Which unless true, all reason turns a lie.")

This leads us to the *second* violation of the laws of a legitimate hypothesis;—the doctrine of a representative perception *annihilates itself*, in subverting the universal edifice of knowledge.—Belying the testimony of consciousness to our immediate perception of an outer world, it belies the veracity of consciousness altogether. But the truth of consciousness, is the condition of the possibility of all knowledge. The first act of Hypothetical Realism, is thus an act of suicide; philosophy, thereafter, is at best but an enchanted corpse, awaiting only the exorcism of the sceptic, to relapse into its proper nothingness.—But of this we shall have occasion to treat at large, in exposing Brown's misprision of the argument from Common Sense.

In the *third* place, it is the condition of a legitimate hypothesis, that the *fact or facts* for which it is excogitated to account, be not *themselves hypothetical*.—But so far is the principal fact, which the hypothesis of a representative perception is proposed to explain, from being certain; its reality is even rendered problematical by the proposed explanation itself. The facts, about which this hypothesis is conversant, are two;—the fact of the

mental modification, and the fact of the *material reality*. The problem to be solved is their connection; and the hypothesis of *representation* is advanced, as the ratio of their correlation, in supposing that the former *as known* is vicarious of the latter *as existing*. There is however here a see-saw between the hypothesis and the fact: the fact is assumed as an hypothesis; and the hypothesis explained as a fact; each is established, each is expounded, by the other. To account for the possibility of an unknown external world, the hypothesis of *representation* is devised; and to account for the possibility of representation, we imagine the hypothesis of an *external world*. Nothing could be more easy than to demonstrate, that on this supposition, the fact of the external reality is not only petitory but improbable. This, however, we are relieved from doing, by Brown's own admission, that "*the sceptical argument for the non-existence of an external world, as a mere play of reasoning, admits of no reply*;" and we shall afterwards prove, that the only ground on which he attempts to vindicate this existence, (the ground of our natural belief in its reality,) is one, not competent to the Hypothetical Realist. We shall see, that if this belief be true, the *hypothesis* itself is superseded; if false, that there is no *fact* for the hypothesis to explain.

In the *fourth* place, a legitimate hypothesis must account for the phenomenon, about which it is conversant, adequately and without violence, in all its dependencies, relations, and peculiarities.—But the hypothesis in question, only accomplishes its end,—nay only vindicates its utility, by a mutilation, or, more properly, by the *destruction and re-creation*, of the very phenomenon for the nature of which it would account. The *entire* phenomenon to be explained by the supposition of a representative perception, is the fact, given in consciousness, of *the immediate knowledge or intuition of an existence different from self*. This simple phenomenon it hews down into two fragments;—into the *existence* and the *intuition*. The existence of external things, which is given only *through* their intuition, it admits; the intuition itself, though the *ratio cognoscendi*, and to us therefore the *ratio essendi* of their reality, it rejects. But to annihilate what is prior and constitutive in the phenomenon, is, in truth, to annihilate the phenomenon altogether. The existence of an external world, which the hypothesis proposes to explain, is no longer even a truncated fact of consciousness; for the *existence given in consciousness*,

necessarily fall with the intuition on which it reposed. A representative perception, is therefore, an hypothetical explanation of a *supposititious* fact: it creates the nature it interprets. And in this respect, of all the varieties of the representative hypothesis, the *third*, or that which views in the object known a modification of thought itself, most violently outrages the phenomenon of consciousness it would explain. And this is Brown's. The *first*, saves the phenomenon of consciousness in so far as it preserves always the numerical, if not always the substantial, difference between the object perceived and the percipient *mind*. The *second*, does not violate at least the antithesis of the object perceived and the percipient *act*. But in the *third* or simplest form of representation, not only is the object known, denied to be itself the reality existing, as consciousness attests;—this object revealed as not-self, is identified with the mental *ego*;—nay, even, though given as permanent, with the *transient energy of thought* itself.

In the *fifth* place, the *fact*, which a legitimate hypothesis is devised to explain, *must be within the sphere of experience*. The fact, however, for which that of a representative perception accounts (the existence of external things), transcends, *ex hypothesi*, all experience; it is the object of no real knowledge, but a bare *ens rationis*—a mere hyperphysical chimæra.

In the *sixth* and last place, an *hypothesis itself* is probable in proportion as it works simply and naturally; that is in proportion as it is dependent on no subsidiary hypothesis, and as it involves nothing, petitory, occult, supernatural, as an element of its explanation. In this respect, the doctrine of a representative perception is not less vicious than in others. To explain at all, it must not only postulate *subsidiary hypotheses*, but *subsidiary miracles*.—The doctrine in question attempts to explain the *knowledge of an unknown world*, by the ratio of a representative perception: but it is impossible by any conceivable relation, to apply the ratio to the facts. The mental modification, of which, on the doctrine of representation, we are exclusively conscious in perception, either *represents* (i. e. affords a mediate knowledge of) a real external world, or it does not. (We say only a *real*; to include all systems from Kant's, who does not predicate even an existence in *space* and *time* of *things in themselves*, to Locke's, who supposes the transcendent reality to *resemble* its idea, at least in the *primary qualities*.) Now, the latter alternative is an affir-

mation of absolute Idealism ; we have, therefore, at present only to consider the former. And here, the mind either *knows* the reality of what it represents, or it does not.—On the *prior* alternative, the hypothesis under discussion would annihilate itself, in annihilating the ground of its utility. For as the *end* of representation is knowledge ; and as the hypothesis of a representative perception is only required on the supposed impossibility of that presentative knowledge of external things, which consciousness affirms:—if the mind is admitted to be cognisant of the outer reality in itself, previous to representation, the *end* towards which the hypothesis was devised as a *mean*, has been already accomplished ; and the possibility of an intuitive perception, as given in consciousness, is allowed. Nor is the hypothesis only absurd, as superfluous. It is worse. For the mind would, in this case, be supposed to *know before it knew* ; or, like the crazy Pentheus, to *see its objects double*,—

(“ Et solem geminum et duplices se ostendere Thebas ”) :

and, if these absurdities be eschewed, then is the *identity* of *mind and self*,—of *consciousness and knowledge*, abolished ; and *my intellect* knows, what *I* am not conscious of it knowing !—The *other* alternative remains :—that the mind is *blindly* determined to *represent* ; and *truly* to represent, the reality which it does not know. And here the mind either *blindly determines itself*, or is *blindly determined by an extrinsic and intelligent cause*.—The former lemma is the more philosophical, in so far as it assumes nothing hyperphysical ; but it is otherwise utterly irrational, in as much as it would explain an effect, by a cause wholly inadequate to its production. On this alternative, knowledge is supposed to be the effect of ignorance,—intelligence of stupidity,—life of death. We are necessarily ignorant, ultimately at least, of the mode in which causation operates ; but we know at least, that no effect arises without a cause—and a cause proportionate to its existence.—The absurdity of this supposition has accordingly constrained the profoundest cosmothetic idealists, notwithstanding their rational abhorrence of a supernatural assumption, to embrace the second alternative. To say nothing of less illustrious schemes, the systems of Divine Assistance, of a Pre-established Harmony, and of the Vision of all things in the Deity, are only so many subsidiary hypotheses,—so many attempts to bridge, by supernatural machinery, the chasm between the *representation* and the *reality*, which all human ingenuity had found, by natural

means, to be insuperable. The hypothesis of a representative perception, thus presupposes a *miracle* to let it work. Dr Brown, indeed, rejects as unphilosophical, those hyperphysical subsidies. But he only saw less clearly than their illustrious authors, the necessity which required them. It is a poor philosophy that eschews the *Deus ex machina*, and yet ties the knot which is only soluble by his interposition. It is not unphilosophical to assume a miracle, if a miracle be necessary; but it is unphilosophical to originate the necessity itself. And here the hypothetical realist cannot pretend, that the difficulty is of nature's, not of his creation. In fact it only arises, *because* he has closed his eyes upon the light of nature, and refused the guidance of consciousness: but having swamped himself in following the *ignis fatuus* of a theory, he has no right to refer its private absurdities to the imbecility of human reason; or to generalise his own factitious ignorance, by a *Quantum est quod nescimus!* The difficulty of the problem Brown has not perceived; or perceiving, has not ventured to state,—far less attempted to remove. He has essayed, indeed, to cut the knot, which he was unable to loose; but we shall find, in the sequel, that his summary postulate of the reality of an external world, on the ground of our belief in its existence, is, in his hands, of all unfortunate attempts, perhaps the most unsuccessful.

The scheme of Natural Realism (which it is Reid's honour to have been the first, among not forgotten philosophers, virtually and intentionally, at least, to embrace) is thus the only system, on which the truth of consciousness and the possibility of knowledge can be vindicated; whilst the Hypothetical Realist, in his effort to be "wise above knowledge," like the dog in the fable, loses the substance, in attempting to realize the shadow. "*Les hommes,*" (says Leibnitz, with a truth of which he was not himself aware,)—" *les hommes cherchent ce qu'ils savent, et ne savent pas ce qu'ils cherchent.*"

That the doctrine of an *intuitive* perception is not without its difficulties, we allow. But these do not affect its possibility; and may in a great measure be removed by a more sedulous examination of the phenomena. The distinction of *perception proper* from *sensation proper*, in other words, of the *objective* from the *subjective* in this act, Reid, after other philosophers, has already turned to good account; but his analysis would have been still more successful, had he discovered the law which universally governs their manifestation:—*That Perception and Sensation,*

the objective and subjective, though both always co-existent, are always in the inverse ratio of each other. But on this matter we cannot at present enter. [See Dissertations on Reid, p. 876-885; and in particular, pp. 886, 887, 888, 865, 880. Notices are there given of some older authors, by whom operations of this principle had been partially and obscurely observed, though the canon itself was never previously generalised.*]

Dr Brown is not only wrong in regard to Reid's own doctrine; he is wrong, even admitting his interpretation of that philosopher to be true, in charging him with a "series of wonderful misconceptions," in regard to the opinions universally prevalent touching the nature of ideas. We shall not argue the case upon the *higher ground*, that Reid, as a natural realist, could not be *philosophically* out, in assailing the hypothesis of a representative perception, even though one of its subordinate modifications might be mistaken by him for another; but shall prove that, supposing Reid to have been like Brown, an hypothetical realist, under the *third* form of a representative perception, he was not *historically* wrong in attributing to philosophers in general, (at least, after the decline of the Scholastic Philosophy,) the *first* or *second* variety of the hypothesis. Even on this *lower ground*, Brown is fated to be unsuccessful; and if Reid be not always correct, his antagonist has failed in convicting him even of a *single* inaccuracy. We shall consider Brown's charge of misrepresentation in detail.

It is always unlucky to stumble on the threshold. The paragraph (Lect. xxvii.) in which Dr Brown opens his attack on Reid, contains more mistakes than sentences; and the etymological discussion it involves, supposes as true, what is not simply false, but diametrically opposite to the truth.—Among other errors:—In the *first* place, the term "*idea*" was never employed in any system, previous to the age of Descartes, to denote "little images derived from objects without." In the *second*, it was never used in any philosophy, prior to the same period, to signify the immediate object of perception. In the *third*, it was not applied by the "Peripatetics or Schoolmen," to express an object of human

* [I see that Mr Wyld, in his ingenious and popular treatise, (Philosophy of the Senses, p. 423), says, that this law is now an established principle in psychology and physiology. I am afraid, not. I may notice, likewise, that in the observations, with which in that book he has elsewhere honoured my doctrine of Perception, he inadvertently just reverses its positions. (1853.)]

thought at all.* In the *fourth*, ideas (taking this term for *species*) were not "in all the dark ages of the scholastic followers of

* The history of the word *idea* seems completely unknown. Previous to the age of Descartes, as a philosophical term, it was employed exclusively by the Platonists,—at least exclusively in a Platonic meaning; and this meaning was *precisely the reverse* of that attributed to the word by Dr Brown;—the *idea was not an object of perception*,—the *idea was not derived from without*.—In the schools, so far from being a current *psychological* expression, as he imagines, it had no other application than a *theological*. Neither, after the revival of letters, was the term extended by the Aristotelians even to the objects of *intellect*. Melancthon indeed (who was a kind of semi Platonist) uses it on *one* occasion as a synonyme for notion, or intelligible species (*De Anima*, p. 187, ed. 1555); but it was even to this solitary instance, we presume, that Julius Scaliger alludes (*De Subtilitate*, vi. 4.), when he castigates such an application of the word as neoteric and abusive. "*Melanch.*" is on the margin. Goclenius also probably founded his usage on Melancthon.—We should have distinctly said, that previous to its employment *by Descartes himself*, the expression had never been used as a comprehensive term for the immediate objects of thought, had we not in remembrance the *Historia Animæ Humanæ* of our countryman David Buchanan. This work, originally written in French, had for some years been privately circulated previous to its publication at Paris in 1636. Here we find the word *idea* familiarly employed, in its most extensive signification, to express the objects, not only of intellect proper, but of memory, imagination, sense; and this is the *earliest* example of such an employment. For the Discourse on Method in which the term is usurped by Descartes in an equal latitude, was at least a year later in its publication—viz. in June 1637. Adopted soon after also by Gassendi, the word under such imposing patronage gradually won its way into general use. In England, however, Locke may be said to have been the first who naturalized the term in its Cartesian universality. Hobbes employs it, and that historically, only once or twice; Henry More and Cudworth are very chary of it, even when treating of the Cartesian philosophy; Willis rarely uses it; while Lord Herbert, Reynolds, and the English philosophers in general, between Descartes and Locke, do not apply it psychologically at all. When in common language employed by Milton and Dryden, *after* Descartes, as *before* him, by Sidney, Spenser, Shakspeare, Hooker, &c. the meaning is Platonic. Our Lexicographers are ignorant of the difference.

The fortune of this word is curious. Employed by Plato to express the real forms of the intelligible world, in lofty contrast to the unreal images of the sensible; it was lowered by Descartes, who extended it to the objects of our consciousness in general. When, after Gassendi, the school of Condillac had analyzed our highest faculties into our lowest, the *idea* was still more deeply degraded from its high original. Like a fallen angel, it was relegated from the sphere of divine intelligence, to the atmosphere of human sense; till at last *Ideologie* (more correctly *Ideologie*), a word which could only *properly* suggest an *a priori* scheme, deducing our knowledge from the intellect, has

Aristotle," regarded as "*little images derived from without*;" for a numerous party of the most illustrious schoolmen rejected *species*, not only in the *intellect*, but in the *sense*. In the *fifth*, "*phantasm*" in "the old philosophy," was not the "*external cause of perception*," but the *internal object of imagination*. In the *sixth*, the term "*shadowy film*," which here and elsewhere he constantly uses, shows that Brown confounds the matterless species of the Peripatetics with the corporeal effluxions of Democritus and Epicurus;—

"Quæ, quasi *membrane*, summo de cortice rerum
Dereptæ, voltant ultro citroque per auras."

Brown, in short, only fails in victoriously establishing against Reid the various meanings in which "*the old writers*" employed the term *idea*, by the petty fact,—that the old writers did not employ the term *idea* at all.

Nor does the progress of the attack belie the omen of its outset. We shall consider the philosophers quoted by Brown in chronological order. Of three of these only, (Descartes, Arnauld, Locke,) were the opinions particularly noticed by Reid; the others, (Hobbes, Le Clerc, Crousaz,) Brown adduces as examples of Reid's general misrepresentation. Of the *greater number* of the philosophers specially criticised by Reid, Brown *prudently says nothing*.

Of these, the first is DESCARTES; and in regard to him, Brown, not content with accusing Reid of simple ignorance, contends, "that the opinions of Descartes are *precisely opposite* to the representations which he has given of them." (Lect. xxvii. p. 172.)—Now Reid states, in regard to Descartes, that this philosopher appears to place the idea or representative object in perception, sometimes in the *mind*, and sometimes in the *brain*; and he acknowledges that while these opinions seem to him contradictory, he is not prepared to pronounce which of them their author held, if he did not indeed hold both together. "Descartes," he says, "seems to have hesitated between the two opinions, or to have passed from one to the other." On any alternative, however, Reid attributes to Descartes, either the *first* or the *second* form of representation. Now here we must recol-

in France become the name peculiarly distinctive of that philosophy of mind which exclusively derives our knowledge from the senses.—Word and thing, *ideas* have been the *crux philosophorum*, since Aristotle sent them packing (*χαίρειναις ἰδέαις*) to the present day.

lect, that the question is not whether Reid be *rigorously right*, but whether he be *inexcusably wrong*. Brown accuses him of the most ignorant misrepresentation,—of interpreting an author, whose perspicuity he himself admits, in a sense “*exactly the reverse*” of truth. To determine what Descartes’ doctrine of perception actually is, would be difficult, perhaps even impossible; but in reference to the question at issue, certainly superfluous. It here suffices to show, that his opinion on this point is one mooted among his disciples; and that Brown, wholly unacquainted with the difficulties of the question, dogmatizes on the basis of a single passage—nay, of a passage in itself irrelevant.

Reid is justified against Brown, if the Cartesian *Idea* be proved, either a *material image in the brain*, or an *immaterial representation in the mind, distinct from the percipient act*. By those not possessed of the key to the Cartesian theory, there are many passages* in the writings of its author, which, taken by themselves, might naturally be construed to import, that Descartes supposed the mind to be conscious of certain *motions in the brain*, to which, as well as to the *modifications of the intellect itself*, he applies the terms *image* and *idea*. Reid, who did not understand the Cartesian philosophy as a system, was puzzled by these superficial ambiguities. Not aware that the cardinal point of that system is,—that mind and body, as essentially opposed, are *naturally* to each other as zero, and that their mutual intercourse can only be *supernaturally* maintained by the concurrence of the Deity;† Reid

* *Ex. gr.* De Pass. § 35,—a passage stronger than any of those noticed by De la Forge. [See also Epist. P. i. ep. 115.]

† That the theory of *Occasional Causes* is necessarily involved in Descartes’ doctrine of *Assistance*, and that his explanation of the connection of mind and body reposes on that theory, it is impossible to doubt. For while he rejects all physical influence in the communication and conservation of motion between bodies, which he refers exclusively to the ordinary concurrence of God, (Princ. P. ii. art. 36 etc.); consequently, he deprives conflicting bodies of all proper efficiency, and reduces them to the mere occasional causes of this phænomenon. But *a fortiori*, he must postulate the hypothesis, which he found necessary in explaining the intercourse of things *substantially the same*, to account for the reciprocal action of two substances, *to him*, of so *incompatible a nature*, as mind and body. De la Forge, Geulinx, Malebranche, Cordermol, and other disciples of Descartes, only explicitly evolve what the writings of their master implicitly contain. We may observe, though we cannot stop to prove, that Tennemann is wrong in denying De la Forge to be even an advocate, far less the first articulate expositor, of the doctrine of *Occasional Causes*.

attributed to Descartes the possible opinion, that the soul is immediately cognisant of *material images in the brain*. But in the Cartesian theory, mind is only conscious of itself; the affections of body may, by the *law of union*, be the proximate *occasions*, but can never constitute the immediate *objects*, of knowledge. Reid, however, supposing that nothing could obtain the name of *image*, which did not represent a prototype, or the name of *idea* which was not an object of thought, thus misinterpreted Descartes; who applies, abusively indeed, these terms to the *occasion* of perception, (*i. e.* the motion in the sensorium, *unknown in itself* and *resembling nothing*), as well as to the *object* of thought, (*i. e.* the representation of which we are conscious in the mind itself.) In the Leibnizio-Wolfian system, *two* elements, both also denominated *ideas*, are in like manner accurately to be contra-distinguished in the process of perception. The *idea in the brain*, and the *idea in the mind*, are, to Descartes, precisely what the "*material idea*," and the "*sensual idea*," are to the Wolfians. In both philosophies, the two ideas are harmonic modifications, correlative and co-existent; but in neither, is the organic affection or material idea an object of consciousness. It is merely the unknown and arbitrary condition of the mental representation; and in the hypotheses both of Assistance and of Pre-established Harmony, the presence of the one idea implies the concomitance of the other, only by virtue of the hyperphysical determination. Had Reid, in fact, not limited his study of the Cartesian system to the writings of its founder, the twofold application of the term *idea*, by Descartes, could never have seduced him into the belief, that so monstrous a solecism had been committed by that illustrious thinker. By De la Forge, the personal friend of Descartes, the verbal ambiguity is, indeed, not only noticed, but removed; and that admirable expositor applies the term "*corporeal species*" to the affection in the brain, and the terms "*idea*," "*intellectual notion*," to the spiritual representation in the conscious mind.—(De l'Esprit, c. 10.)

But if Reid be wrong in his supposition, that Descartes admitted a consciousness of ideas *in the brain*;* is he on the *other alter-*

* Reid's error on this point is however surpassed by that of M. Royer-Collard, who represents the idea in the Cartesian doctrine of perception as *exclusively* situate in the brain. (Œuvres de Reid, iii. p. 334.) [Coleridge similarly errs. See his Biographia Literaria.]

native wright, and inexcusably wright, in holding that Descartes supposed ideas *in the mind, not identical with their perceptions?* Malebranche, the most illustrious name in the school after its founder, (and who, not certainly with less ability, may be supposed to have studied the writings of his master, with far greater attention than either Reid or Brown,) ridicules, as "*contrary to common sense and justice*," the supposition that Descartes had rejected ideas in "*the ordinary acceptation*," and adopted the hypothesis of their being representations, not really distinct from their perception. And while "he is as certain as he possibly can be in such matters," that Descartes had not dissented from the general opinion, he taunts Arnauld with resting his paradoxical interpretation of that philosopher's doctrine, "not on any passages of his Metaphysic contrary to the *common opinion*," but on his own arbitrary limitation of "*the ambiguous term perception*." (Réponse au Livre des Idées, passim; ARNAULD, Œuvres, xxxviii. pp. 388, 389.) That ideas are "*found in the mind, not formed by it*," and consequently, that in the act of knowledge the representation is really distinct from the cognition proper, is strenuously asserted as the doctrine of his master by the Cartesian Roell, in the controversy he maintained with the Anti-Cartesian De Vries. (ROELLI Disputationes; DE VRIES De Ideis innatis.)—But it is idle to multiply proofs. Brown's charge of ignorance falls back upon himself; and Reid may lightly bear the reproach of "*exactly reversing*" the notorious doctrine of Descartes, when thus borne, along with him, by the profoundest of that philosopher's disciples.

Had Brown been aware, that the point at issue between him and Reid, was one agitated among the followers of Descartes themselves, he could hardly have dreamt of summarily determining the question by the production of one vulgar passage from the writings of that philosopher. But we are sorely puzzled to account for his hallucination, in considering this passage pertinent. Its substance is fully given by Reid in his exposition of the Cartesian doctrine. Every iota it contains, of any relevancy, is adopted by Malebranche;—constitutes, less precisely indeed, his famous distinction of *perception* (*idée*) from *sensation* (*senti-ment*): and Malebranche is one of the two modern philosophers, admitted by Brown to have held the hypothesis of representation in its *first*, and, as he says, its most "*erroneous*" form. But principles that coalesce, even with the hypothesis of ideas *distinct*

from mind, are not, *a fortiori*, incompatible with the hypothesis, of ideas *distinct only from the perceptive act*.—We cannot, however, enter on an articulate exposition of its irrelevancy.

To adduce HOBBS, as an instance of Reid's misrepresentation of the "common doctrine of ideas," betrays, on the part of Brown, a total misapprehension of the conditions of the question;—or he forgets that Hobbes was a materialist.—The doctrine of representation, under all its modifications, is *properly* subordinate to the doctrine of a spiritual principle of thought; and on the supposition, all but universally admitted among philosophers, that the relation of knowledge implied the analogy of existence, it was mainly devised to explain the possibility of a knowledge by an immaterial subject, of an existence so disproportioned to its nature, as the qualities of a material object. Contending, that an immediate cognition of the accidents of matter, infers an essential identity of matter and mind, Brown himself admits, that the hypothesis of representation belongs exclusively to the doctrine of dualism (Lect. xxv. pp. 159, 160); whilst Reid, assailing the hypothesis of ideas, only as subverting the reality of matter, could hardly regard it as parcel of that scheme, which acknowledges the reality of nothing else.—But though Hobbes cannot be adduced as a competent witness *against Reid*, he is however valid evidence *against Brown*. Hobbes, *though a materialist*, admitted no knowledge of an external world. Like his friend Sorbiere, he was a kind of *material idealist*. According to him, we know nothing of the qualities or existence of any outward reality. All that we know is the "*seeming*," the "*apparition*," the "*aspect*," the "*phænomenon*," the "*phantasm*," within ourselves; and this *subjective object*, of which we are conscious, and which is consciousness itself, is nothing more than the "*agitation*" of our internal organism, determined by the unknown "*motions*," which are supposed, in like manner, to constitute the world without. *Perception* he reduces to *sensation*. Memory and imagination are faculties *specifically* identical with sense, differing from it simply in the *degree* of their vivacity; and this difference of intensity, with Hobbes as with Hume, is the only discrimination between our dreaming and our waking thoughts.—A doctrine of perception identical with Reid's!

In regard to ARNAULD, the question is not, as in relation to the others, whether Reid conceives him to maintain a form of the ideal theory which he rejects, but whether *Reid admits Arnauld's*

opinion on perception and his own to be identical.—"To these authors," says Brown, "whose opinions, on the subject of perception, Reid has misconceived, I may add one, whom even he himself allows to have shaken off the ideal system, and to have considered the idea and the perception, as not distinct, but the same, a modification of the mind and nothing more. I allude to the celebrated Jansenist writer, Arnauld, who maintains *this doctrine as expressly as Reid himself*, and makes it the foundation of his argument in his controversy with Malebranche." (Lecture xxvii. p. 173.)—If this statement be not untrue, then is Brown's interpretation of Reid himself correct. A representative perception, under its *third* and simplest modification, is held by Arnauld as by Brown; and his exposition is so clear and articulate, that all essential misconception of his doctrine is precluded. In these circumstances, if Reid avow the identity of Arnauld's opinion and his own, this avowal is tantamount to a declaration that his peculiar doctrine of perception is a scheme of representation; whereas, on the contrary, if he signalise the contrast of their two opinions, he clearly evinces the radical antithesis,—and his sense of the radical antithesis,—of the doctrine of *intuition*, to every, even the simplest form of the hypothesis of *representation*. And this last he does.

It cannot be maintained, that Reid admits a philosopher to hold an opinion convertible with his, whom he states:—"to profess the doctrine, *universally received*, that *we perceive not material things immediately*,—that it is their *ideas, which are the immediate objects of our thoughts*,—and that it is *in the idea of every thing, that we perceive its properties*." This fundamental contrast being established, we may safely allow, that the radical misconception, which caused Reid to overlook the difference of our presentative and representative faculties, caused him likewise to believe, that Arnauld had attempted to unite two contradictory theories of perception. Not aware, that it was possible to maintain a doctrine of perception, in which the idea was not really distinguished from its cognition, and yet to hold that the mind had no immediate knowledge of external things: Reid supposes, in the *first* place, that Arnauld, in rejecting the hypothesis of ideas, as representative entities, really distinct from the contemplative act of perception, coincided with himself in viewing the material reality, as the immediate object of that act; and, in the *second*, that Arnauld again deserted this opinion, when, with the philosophers, he main-

tained that the idea, or act of the mind representing the external reality, and not the external reality itself, was the immediate object of perception. But Arnauld's theory is one and indivisible; and, as such, no part of it is identical with Reid's. Reid's confusion, here as elsewhere, is explained by the circumstance, that he had never speculatively conceived the possibility of the simplest modification of the representative hypothesis. He saw no medium between rejecting ideas as something different from thought, and the doctrine of an immediate knowledge of the material object. Neither does Arnauld, as Reid supposes, ever assert against Malebranche, "that we perceive external things immediately," that is, in themselves.* Maintaining *that all our perceptions are modifications essentially representative*, Arnauld everywhere avows, that he denies ideas, *only as existences distinct from the act itself of perception*.†

Reid was therefore wrong, and did Arnauld less than justice, in viewing his theory "as a weak attempt to reconcile two inconsistent doctrines:" he was wrong, and did Arnauld more than justice, in supposing, that one of these doctrines is not incompatible with his own. The detection, however, of this error only tends to manifest more clearly, how just, even when under its influence, was Reid's appreciation of the contrast, subsisting between his own and Arnauld's opinion, considered *as a whole*; and exposes more glaringly Brown's general misconception of Reid's philosophy, and his present gross misrepresentation, in affirming that the doctrines of the two philosophers were identical, and by Reid admitted to be the same.

Nor is Dr Brown more successful in his defence of LOCKE.

* This is perfectly clear from Arnauld's own uniform statements; and it is justly observed by Malebranche, in his Reply to the Treatise On True and false Ideas, (p. 123, orig. edit.)—that, "in reality, according to M. Arnauld, we do not perceive bodies; we perceive only ourselves." [Arnauld answered:—"In reality, according to M. Malebranche, we do not perceive bodies; we perceive God."]

† Œuvres, t. xxxviii. pp. 187, 198, 199, 389, *et passim*. It is to be recollected that Descartes, Malebranche, Arnauld, Locke, and philosophers in general before Reid, employed the term *Perception* as co-extensive with *Consciousness* or *Apprehension*.—By Leibnitz, Wolf, and their followers, it was used in a peculiar sense,—as equivalent to *Representation* or *Idea proper*, and as contradistinguished from *Apperception*, or consciousness. Reid's limitation of the term, though the grounds on which it is defended are not of the strongest, is convenient, and has been very generally admitted.

Supposing always, that ideas were held to be something distinct from their cognition, Reid states it, as that philosopher's opinion, "that images of external objects were conveyed to the brain; but whether he thought with Des Cartes [*erratum for Dr Clarke?*] and Newton, that the images in the brain are perceived by the mind, there present, or that they are imprinted on the mind itself, is not so evident." This, Dr Brown, nor is he original in the assertion, pronounces a flagrant misrepresentation. Not only does he maintain, that Locke never conceived the idea to be substantially different from the mind, as a material image in the brain; but, that he never supposed it to have an existence apart from the mental energy of which it is the object. Locke, he asserts, like Arnauld, considered the idea perceived and the percipient act, to constitute the same indivisible modification of the conscious mind. We shall see.

In his *language*, Locke is, of all philosophers, the most figurative, ambiguous, vacillating, various, and even contradictory;—as has been noticed by Reid, and Stewart, and Brown himself,—indeed, we believe, by every author who has had occasion to comment on this philosopher. The opinions of such a writer are not, therefore, to be assumed from isolated and casual expressions, which themselves require to be interpreted on the general analogy of his system; and yet this is the only ground on which Brown attempts to establish his conclusions. Thus, on the matter under discussion, though *really* distinguishing, Locke *verbally* confounds, the objects of sense and of intellect,—the operation and its object,—the objects immediate and mediate,—the object and its relations,—the images of fancy and the notions of the understanding. Consciousness is converted with Perception,—Perception with Idea,—Idea with Ideatum, and with Notion, Conception, Phantasm, Representation, Sense, Meaning, &c. Now, his language identifying ideas and perceptions, appears conformable to a disciple of Arnauld; and now it proclaims him a follower of Digby,—explaining ideas by mechanical impulse and the propagation of material particles from the external reality to the brain. The idea would seem, in one passage, an organic affection,—the mere occasion of a spiritual representation; in another, a representative image, in the brain itself. In employing thus indifferently the language of every hypothesis, may we not suspect, that he was anxious to be made responsible for none? One, however, he has formally rejected: and that is the

very opinion attributed to him by Brown,—that the idea, or object of consciousness in perception, is *only a modification of the mind itself*.

We do not deny, that Locke occasionally employs expressions, which, in a writer of more considerate language, would imply the identity of ideas with the act of knowledge; and, under the circumstances, we should have considered suspense more rational than a dogmatic confidence in any conclusion, did not the following passage, which has never, we believe, been noticed, appear a positive and explicit contradiction of Dr Brown's interpretation. It is from Locke's "Examination of P. Malebranche's Opinion," which, as subsequent to the publication of the *Essay*, must be held authentic, in relation to the doctrines of that work. At the same time, the statement is articulate and precise, and possesses all the authority of one cautiously made in the course of a polemical discussion. Malebranche coincided with Arnauld, and consequently with Locke, *as interpreted by Brown*, to the extent of supposing, that *sensation proper* is nothing but a state or modification of the mind itself; and Locke had thus the opportunity of expressing, in regard to this opinion, his agreement or dissent. An acquiescence in the doctrine, that the *secondary* qualities, of which we are conscious in *sensation*, are merely mental states, by no means involves an admission that the *primary* qualities of which we are conscious in *perception*, are nothing more. Malebranche, for example, affirms the one and denies the other. But if Locke be found to ridicule, as he does, *even* the opinion which *merely* reduces the secondary qualities to mental states, *a fortiori*, and this *on the principle of his own philosophy*, he must be held to reject the doctrine, which would reduce not only the non-resembling sensations of the secondary, but even the resembling, and consequently extended, ideas of the primary qualities of matter, to modifications of the immaterial unextended mind. In these circumstances, the following passage is superfluously conclusive against Brown; and equally so, whether we coincide or not in all the principles it involves.—"But to examine their doctrine of *modification* a little farther. Different sentiments (sensations) are different modifications of the mind. The mind, or soul, that perceives, is one immaterial indivisible substance. Now I see the white and black on this paper, I hear one singing in the next room, I feel the warmth of the fire I sit by, and I taste an apple I am eating, and all this at the same time. Now, I ask, take

modification for what you please, can the same unextended, indivisible substance have different, nay, inconsistent and opposite (as these of white and black must be) modifications at the same time? Or must we suppose distinct parts in an indivisible substance, one for black, another for white, and another for red ideas, and so of the rest of those infinite sensations, which we have in sorts and degrees; all which we can distinctly perceive, and so are distinct ideas, some whereof are opposite, as heat and cold, which yet a man may feel at the same time? I was ignorant before, how sensation was performed in us: this they call an explanation of it! Must I say now I understand it better? If this be to cure one's ignorance, it is a very slight disease, and the charm of two or three insignificant words will at any time remove it; *probatum est.*" (See. 39.)—This passage, as we shall see, is correspondent to the doctrine held on this point by Locke's personal friend and philosophical follower, Le Clerc. (But, what is curious, the suppositions which Locke here rejects, as incompatible with the spirituality of mind, are the very facts, on which Ammonius Hermiæ, Philoponus, and Condillac, among many others, found their proof of the immateriality of the thinking subject.)

But if it be thus evident, that Locke held neither the *third* form of representation, that lent to him by Brown, nor even the *second*; it follows, that Reid did him anything but injustice, in supposing him to maintain, that ideas are objects, *either* in the *brain*, or in the *mind* itself. Even the *more material* of these alternatives has been the one generally attributed to him by his critics,* and the one adopted from him by his disciples.† Nor is this to be deemed an opinion too monstrous to be entertained by so enlightened a philosopher. It was, as we shall see, the common opinion of the age; the opinion, in particular, held by the most illustrious of his countrymen and contemporaries—by Newton, Clarke, Willis, Hook, &c.‡ The English psychologists have indeed been generally very mechanical.

* To refer only to the *first* and *last* of his regular critics:—see "Solid Philosophy asserted against the Fancies of the Ideists, by J. S." [JOHN SERGEANT.] Lond. 1697, p. 161,—a very curious book, *absolutely*, we may say, *unknown*; and Cousin, Cours de Philosophie, t. ii. 1829; pp. 330, 357, 325, 365—the most important work on Locke since the "Nouveaux Essais" of Leibnitz.

† TUCKER'S Light of Nature, i. pp. 15, 18, ed. 2.

‡ On the opinion of Newton and Clarke, see Des Maizeaux's Recueil, i. pp. 7, 8, 9, 15, 22, 75, 127, 169, &c. Genovesi notices the crudity of Newton's

Dr Brown at length proceeds to consummate his imagined victory, by "*that most decisive evidence*, found not in treatises read only by a few, but in the popular elementary works of science of the time, the *general text-books* of schools and colleges." He quotes, however, only two:—the *Pneumatologia* of Le Clerc, and the *Logica* of Crousaz.

"LE CLERC," says Brown, "in his chapter on the nature of ideas, gives the history of the opinions of philosophers on this subject, and states among them the very doctrine which is most forcibly and accurately opposed to the ideal system of perception. '*Alii putant ideas et perceptiones idearum easdem esse, licet relationibus differant*. Idea, uti censent, proprie ad objectum referatur, quod mens considerat;—perceptio, vere ad mentem ipsam quæ percipit: sed duplex illa relatio ad unam modificationem mentis pertinet. Itaque, secundum hosce philosophos, nullæ sunt, proprie, loquendo ideæ a mente nostra distinctæ.' *What is it, I may ask, which Dr Reid considers himself as having added to this very philosophical view of perception?* and if he added nothing, it is surely too much to ascribe to him the merit of detecting errors, the counter statement of which had long formed a part of the elementary works of the school."

In the *first* place, Reid certainly "*added*" nothing "*to this very philosophical view of perception,*" but he *exploded it altogether*.

In the *second*, it is false, *either* that this doctrine of perception "*had long formed part of the elementary works of the schools,*" or that Le Clerc affords any countenance to this assertion. On the contrary, it is virtually stated by him to be the *novel paradox*

doctrine, "*Mentem in cerebro præsidere atque in eo, suo scilicet sensorio, rerum imagines cernere.*"—On Willis, see his work *De Anima Brutorum*, p. 64, alibi, ed. 1672.—On Hook, see his *Lecture on Light*, § 7.—We know not whether it has been remarked that Locke's doctrine of particles and impulse, is precisely that of Sir Kenelm Digby; and if Locke adopts *one* part of so gross an hypothesis, what is there improbable in his adoption of the *other*?—that the object of perception is, "*a material participation of the bodies that work on the outward organs of the senses.*" (Digby, *Treatise of Bodies*, c. 32.) As a specimen of the mechanical explanations of mental phenomena then considered satisfactory, we quote Sir Kenelm's theory of memory.—"*Out of which it followeth, that the little similitudes which are in the caves of the brain, wheeling and swimming about, almost in such sort as you see in the washing of currants or rice by the winding about and circular turning of the cook's hand, divers sorts of bodies do go their course for a pretty while; so that the most ordinary objects cannot but present themselves quickly,*" &c. &c. (*ibidem*.)

of a *single* philosopher; nay, to carry the blunder to hyperbole, it is already, as such a singular opinion, discussed and referred to its author by *Reid himself*. Had Brown proceeded from the tenth paragraph, which he quotes, to the fourteenth, which he *could not have read*, he would have found, that the passage extracted, so far from containing the statement of an old and familiar dogma in the schools, was, neither more nor less, than a statement of the *contemporary hypothesis of*—ANTONY ARNAULD! and of Antony Arnauld *ALONE*!!

In the *third* place, from the mode in which he cites Le Clerc, his silence to the contrary, and the general tenor of his statement, Brown would lead us to believe, that Le Clerc himself coincides in "this very philosophical view of perception." So far, however, from coinciding with Arnauld, he pronounces his opinion to be false; controverts it upon very solid grounds; and in delivering his own doctrine touching ideas, though sufficiently cautious in telling us what they are, he has no hesitation in assuring us, among other things which they cannot be, that they *are not modifications or essential states of mind*. "*Non est (idea sc.) modificatio aut essentia mentis: nam præterquam quod sentimus ingens esse discrimen inter ideæ perceptionem et sensationem; quid habet mens nostra simile monti, aut innumeris ejusmodi ideis?*"—(Pneumat. sect. i. c. 5. § 10.)

On all this no observation of ours can be either so apposite or authoritative, as the edifying reflections with which Dr Brown himself concludes his vindication of the philosophers against Reid. Brown's precept is sound, but his example is instructive. One word we leave blank, which the reader may himself supply.—"*That a mind so vigorous as that of Dr ——— should have been capable of the series of misconceptions which we have traced, may seem wonderful, and truly is so; and equally, or rather still more wonderful, is the general admission of his merit in this respect. I trust it will impress you with one important lesson—to consult the opinions of authors in their own works, and not in the works of those who profess to give a faithful account of them. From my own experience I can most truly assure you, that there is scarcely an instance in which I have found the view I had received of them to be faithful. There is usually something more, or something less, which modifies the general result; and by the various additions and subtractions thus made, so much of the spirit of the original doctrine is lost, that it may, in some cases, be considered as having*

made a fortunate escape, if it *be not at last represented as directly opposite to what it is.*" (Leet. xxvii. p. 175.)

The cause must, therefore, be unconditionally decided in favour of Reid, even on that testimony, which Brown triumphantly produces in court, as "*the most decisive evidence*" against him:—here then we might close our case. To signalize, however, more completely the whole character of the accusation, we shall call a few witnesses; to prove, in fact, nothing more than that Brown's own "*most decisive evidence*" is not *less* favourable to himself, than any other that might be cited from the great majority of the learned.

MALEBRANCHE, in his controversy with Arnauld, everywhere *assumes* the doctrine of ideas, really distinct from their perception, to be the one "*commonly received*;" nor does his adversary venture to dispute the assumption. (Rep. au Livre des Idées.—Arnauld, Œuv. t. xxxviii. p. 388.)

LEIBNITZ, on the other hand, in answer to Clarke, *admits*, that the *crude* theory of ideas held by this philosopher, *was the common*. "Je ne demeure point d'accord des *notions vulgaires*, comme si les *Images des choses étoient transportées, par les organes, jusqu'à l'ame*. Cette notion de la *Philosophie Vulgaire* n'est point intelligible, comme les nouveaux Cartesiens l'ont assez montré. L'on ne sauroit expliquer comment la substance *immatérielle* est affectée par la *matière*: et soutenir une chose non intelligible là-dessus, c'est recourir à la notion scholastique chimérique de je ne sai quelles *espèces intentionnelles* inexplicable, qui passent des organes dans l'ame." (Opera, II. p. 161.) Nor does Clarke, in reply, disown this doctrine for himself and others.—(Ibid. p. 182.)

BRUCKER, in his *Historia Philosophica Doctrinæ de Ideis* (1723), speaks of Arnauld's hypothesis as a "*peculiar opinion*," rejected by "*philosophers in general* (plerisque eruditis)," and as not less untenable than the paradox of Malebranche.—(P. 248.)

Dr Brown is fond of *text-books*. Did we condescend to those of *ordinary* authors, we could adduce a cloud of witnesses against him. As a sample, we shall quote only three, but these of the *very highest* authority.

CHRISTIAN THOMASIIUS, though a reformer of the Peripatetic and Cartesian systems, adopted a grosser theory of ideas than either. In his *Introductio ad Philosophiam Aulicam*, (1702,) he defines thought in general, a mental discourse "*about images, by*

the motion of external bodies, and through the organs of sense, stamped in the substance of the brain." (c. 3. § 29. See also his *Inst. Jurispr. Div. L. i. c. 1.*, and *Introd. in Philos. Ration. c. 3.*)

S'GRAVESANDE, in his *Introductio ad Philosophiam*, (1736,) though professing to leave undetermined, the *positive* question of the origin of Ideas, and admitting that Sensations proper are "nothing more than modifications of the mind itself;" makes no scruple, in determining the *negative*, to dismiss, as absurd, the hypothesis, which would reduce sensible *ideas* to an equal subjectivity. "*Mentem ipsam has ideas efficere, et sibi ipsi representare res, quarum his solis Ideis cognitionem acquirit, nullo modo concipi potest. Nulla inter causam et effectum relatio daretur.*" (§§ 279, 282.)

GENOVESI, in his *Elementa Metaphysicæ*, (1748,) lays it down as a fundamental position of philosophy, *that ideas and the act cognitive of ideas are distinct*. In the chapter, "*De Idearum natura et origine*," (Prop. xxx.) it is said:—"*Ideæ et Perceptiones non videntur esse posse una eademque res*"; and he ably refutes the hypothesis of Arnauld, which he reprobates as a paradox, unworthy of that illustrious reasoner. (Pars II. p. 140.) [The same is found in the amplified edition of 1753, vol. ii. p. 153; and in the still fuller edition of 1764, vol. iii. p. 181. See also his *Ars Logico-Critica*, L. ii. c. ii., ed. 1779, p. 8, sq.; and his *Logica pe'Giovanetti* (1766), L. ii. c. i., ed. 1835, p. 49, sq.]

VOLTAIRE's *Dictionnaire Philosophique* may be adduced as representing the intelligence of the age of Reid himself. "*Qu'est ce qu'une Idée?—C'est une Image qui se peint dans mon cerveau. —Toutes vos pensées sont donc des images?—Assurément,*" &c. (voce *Idée*.)

What, in fine, is the doctrine of the two most numerous schools of modern philosophy—the LEIBNITIAN and KANTIAN? Both

* LEIBNITZ;—Opera, Dutensii, tom. II. pp. 21, 23, 33, 214, pars II. pp. 137, 145, 146. Œuvres Philos. par Raspe, pp. 66, 67, 74, 96, etc. WOLF;—Psychol. Rat. § 10, etc. Psychol. Emp. § 48. KANT—Critik. d. r. V. p. 376. ed. 2. Anthropologie, § 5. With one restriction, Leibnitz's doctrine is that of the lower Platonists, who maintained that the soul actually contains representations of every possible substance and event in the world during the revolution of the *great year*; although these *cognitive reasons* are not elicited into consciousness, unless the reality, thus represented, be itself brought within the sphere of the sensual organs. (Plotinus, Enn. V. lib. vii. cc. 1, 2, 3.)

maintain that the mind involves representations of which it is not, and never may be, conscious; that is, both maintain the second form of the hypothesis, and one of the two that Reid understood and professedly assailed. [This statement requires qualification.]

In Crousaz, Brown has actually succeeded in finding *one* example (he might have found twenty), of a philosopher, before Reid, holding the same theory of ideas with Arnauld and himself.*

The reader is now in a condition to judge of the correctness of Brown's statement, "that with the exception of Malebranche and Berkeley, who had peculiar and very erroneous notions on the subject, ALL the philosophers whom Dr Reid considered himself as opposing," (what! Newton, Clarke, Hook, Norris, Porterfield, &c.?—these, be it remembered, ALL severally attacked by Reid, Brown has neither ventured to defend, nor to acknowledge that he could not,)—"would all, if they had been questioned by him, have admitted, before they heard a single argument on his part, *that their opinions with respect to ideas were precisely the same as his own.*" (Lect. xxvii. p. 174.†)

* In speaking of this author, Dr Brown, who never loses an opportunity to depreciate Reid, goes out of his way to remark, "that precisely the same distinction of *sensations* and *perceptions*, on which Dr Reid founds so much, is stated and enforced in the different works of this ingenious writer," and expatiates on this conformity of the two philosophers, as if he deemed its detection to be something new and curious. Mr Stewart had already noticed it in his Essays. But neither he nor Brown seem to recollect, that Crousaz only copies Malebranche, *re et verbis*, and that Reid had himself expressly assigned to that philosopher the merit of *first* recognising the distinction. This is incorrect. But M. Royer Collard (Reid, Œuvres t. iii. p. 329) is still more inaccurate in thinking that Malebranche and Leibnitz (Leibnitz!) were perhaps the *only* philosophers before Reid, who had discriminated perception from sensation. The distinction was established by Des Cartes; and after Malebranche, but long before Reid, it had become even common; and so far is Leibnitz from having any merit in the matter, his criticism of Malebranche shows, that with all his learning he was strangely ignorant of a discrimination then familiar to philosophers in general, which may indeed be traced under various appellations to the most ancient times. [A contribution towards this history, and a reduction of the qualities of matter to *three* classes, under the names of *Primary*, *Secundo-primary*, and *Secondary*, is given in the Supplementary Dissertations appended to Reid's Works (p. 825-875.)]

† [It would be easy, were it not superfluous, to expose the futility of Brown's assertion, by another and a greater "cloud of witnesses" I may,

We have thus vindicated our original assertion:—BROWN HAS NOT SUCCEEDED IN CONVICTING REID, EVEN OF A SINGLE ERROR.

Brown's mistakes regarding the opinions on perception, entertained by Reid and the philosophers, are perhaps, however, even less astonishing, than his total misconception of the purport of Hume's reasoning against the existence of matter, and of the *argument* by which Reid invalidates Hume's *sceptical* conclusion. We shall endeavour to reduce the problem to its simplicity.

Our knowledge rests ultimately on certain facts of consciousness, which as *primitivo*, and consequently incomprehensible, are given less in the form of *cognitions* than of *beliefs*. But if consciousness in its last analysis—in other words, if our *primary experience*, be a faith; the reality of our knowledge turns on the veracity of our constitutive beliefs. As ultimate, the quality of these beliefs cannot be inferred; their truth, however, is in the first instance to be presumed. As given and possessed, they must stand good until refuted; "*neganti incumbit probatio*." It is not to be presumed, that Intelligence gratuitously annihilates itself;—that Nature operates in vain;—that the Author of nature creates only to deceive.

"Φήμη δ' οὐποτε πάνπαν ἀπόλλυται, ἥτιμα πάντες
ἄσσοι φημίζοντες Θεοῦ γὰρ τίς ἰστί καὶ αὐτῇ."—HESIOD.

But though the truth of our instinctive faiths must in the *first instance* be admitted, their falsehood may *subsequently* be established: this however only through themselves—only on the ground of their reciprocal contradiction. Is this contradiction proved, the edifice of our knowledge is undermined; for "*no lie is of the truth*." Consciousness is to the philosopher, what the Bible is to the theologian. Both are professedly revelations of divine truth; both exclusively supply the constitutive principles of knowledge, and the regulative principles of its construction. To both we must resort for *elements* and for *laws*. Each may be disproved, but disproved only by itself. If one or other reveal facts, which, as mutually repugnant, cannot but be false, the

however, notice, that Aler, a well-informed author, states, in the first quarter of the last century—"Has objectorum sensibiles species dari hodie ADVID OMNES in confesso est." (Pauli Aleri, Soc. Jesu., &c., Philosophiæ Tripartitæ, p. iii. n. 345. Colonæ, 1724.) I may observe, that there is in this book a good discussion upon the nature of these Species, the result of which is, that they are neither substantial effluvia, as held by the Epicureans, nor mere motions in the organisms, as held by the Cartesians.]

authenticity of that revelation is invalidated; and the criticism which signalizes this self-refutation, has, in either case, been able to convert assurance into scepticism,—“to turn the truth of God into a lie,”

“Et violare *fidem primam*, et convellere tota
Fundamenta quibus nixatur *vita salusque*.”—LUCRETIVS.

As psychology is only a developed consciousness, that is, a scientific evolution of the facts of which consciousness is the guarantee and revelation: the positive philosopher has thus a primary presumption in favour of the elements out of which his system is constructed; whilst the sceptic, or negative philosopher, must be content to argue back to the falsehood of these elements, from the impossibility which the dogmatist may experience, in combining them into the harmony of truth. For truth is one; and the end of philosophy is the intuition of unity. Scepticism is not an original or independent method; it is the correlative and consequent of Dogmatism; and so far from being an enemy to truth, it arises only from a false philosophy, as its indication and its cure. “*Alte dubitat, qui altius credit*.” The sceptic must not himself establish, but from the dogmatist accept, his principles; and his conclusion is only a reduction of philosophy to zero, on the hypothesis of the doctrine from which his premises are borrowed.—Are the principles which a particular system involves, convicted of contradiction; or, are these principles proved repugnant to others, which, as facts of consciousness, every positive philosophy must admit; there is established a *relative scepticism*, or the conclusion, that philosophy, in so far as realised in this system, is groundless.—Again, are the principles, which, as facts of consciousness, philosophy in general must comprehend, found exclusive of each other; there is established an *absolute scepticism*; the impossibility of all philosophy is involved in the negation of the one criterion of truth. Our statement may be reduced to a dilemma. Either the facts of consciousness can be reconciled, or they cannot. If they cannot, knowledge absolutely is impossible, and every system of philosophy therefore false. If they can, no system which supposes their inconsistency can pretend to truth.

As a legitimate sceptic, Hume could not assail the foundations of knowledge in themselves. His reasoning is from their subsequent contradiction to their original falsehood; and his premises, not established by himself, are accepted only as principles universally conceded in the previous schools of philosophy. On the

assumption, that what was thus unanimously admitted by philosophers, must be admitted of philosophy itself, his argument against the certainty of knowledge was triumphant.—Philosophers agreed in rejecting certain primitive beliefs of consciousness as false, and in usurping others as true. If consciousness, however, were confessed to yield a lying evidence in one particular, it could not be adduced as a credible witness at all:—“*Falsus in uno, falsus in omnibus.*” But as the reality of our knowledge necessarily rests on the assumed veracity of consciousness, it thus rests on an assumption implicitly admitted by all systems of philosophy to be illegitimate.

“*Faciant, nœ, intelligendo, ut nihil intelligant!*”

Reid (like Kant) did not dispute Hume's inference, *as deduced from its antecedents*. He allowed his scepticism, *as relative*, to be irrefragable; and that philosophy could not be saved from *absolute* scepticism, unless his conceded promises could be disallowed, by refuting the principles universally acknowledged by modern philosophers. This he applied himself to do. He subjected these principles to a new and rigorous criticism. If his analysis be correct, (and it was so, at least in spirit and intention), it proved them to be hypotheses, on which the credulous sequacity of philosophers—“*philosophorum credula natio*”—had bestowed the prescriptive authority of self-evident truths; and showed, that where a genuine fact of consciousness had been surrendered, it had been surrendered in deference to some groundless assumption, which, in reason, it ought to have exploded. Philosophy was thus again reconciled with Nature; consciousness was not a bundle of antilogies; certainty and knowledge were not evicted from man.

All this Dr Brown completely misunderstands. He comprehends neither the reasoning of Scepticism, in the hands of Hume, nor the argument from Common Sense, in those of Reid. Retrograding himself to the tenets of that philosophy, whose contradictions Hume had fairly developed into scepticism, he appeals against this conclusion to the argument of common sense; albeit that argument, if true, belies his hypothesis, and if his hypothesis be true, is belied by it. Hume and Reid he actually represents as maintaining precisely the same doctrine, on precisely the same grounds; and finds both concurring with himself, in advocating that very opinion, which the one had resolved into a negation of all knowledge, and the other exploded as a baseless hypothesis.

Our discussion, at present, is limited to a single question,—to the truth or falsehood of consciousness in assuring us of the reality of a material world. In perception, consciousness gives, as an ultimate fact, *a belief of the knowledge of the existence of something different from self*. As ultimate, this belief cannot be reduced to a higher principle; neither can it be truly analysed into a double element. We only believe that this something *exists*, because we believe that we *know* (are conscious of) this something as existing; the *belief of the existence* is necessarily involved in the *belief of the knowledge of the existence*. Both are original, or neither. Does consciousness deceive us in the latter, it necessarily deludes us in the former; and if the former, *though* a fact of consciousness, be false; the latter, *because* a fact of consciousness, is not true. The beliefs contained in the two propositions:—

1°, *I believe that a material world exists;*

2°, *I believe that I immediately know a material world existing,*
(in other words, *I believe that the external reality itself is the object of which I am conscious in perception*):—

though distinguished by philosophers, are thus virtually identical.

The belief of an external world, was too powerful, not to compel an acquiescence in its truth. But the philosophers yielded to nature, only in so far as to coincide in the dominant result. They falsely discriminated the *belief in the existence*, from the *belief in the knowledge*. With a few exceptions, they held fast by the truth of the first; but, on grounds to which it is not here necessary to advert, they concurred, with singular unanimity, in abjuring the second. The object of which we are conscious in perception, could only, they explicitly avowed, be a representative image present to the mind;—an image which, they implicitly confessed, we are necessitated to regard as identical with the unknown reality itself. Man, in short, upon the common doctrine of philosophy, was doomed by a perfidious nature to realise the fable of Narcissus; he mistakes self for not-self,

———“*corpus putat esse quod umbra est.*”

To carry these principles to their issue was easy; and scepticism in the hands of Hume was the result. The absolute veracity of consciousness was invalidated by the falsehood of one of its facts; and the belief of the *knowledge*, assumed to be delusive, was even supposed in the belief of the *existence*, admitted to be true. The uncertainty of knowledge in general, and in particular, the problematical existence of a material world, were thus

legitimately established.—To confute this reduction on the conventional ground of the philosophers, Reid saw to be impossible ; and the argument which he opposed, was, in fact, immediately subversive of the dogmatic principle, and only mediately of the sceptical conclusion. This reasoning was of very ancient application, and had been even long familiarly known by the name of the *argument from Common Sense*. [See Diss., 742—803.]

To argue from common sense is nothing more than to render available the presumption in favour of the original facts of consciousness,—that *what is by nature necessarily BELIEVED to be, truly is*. Aristotle, in whose philosophy this presumption obtained the authority of a principle, thus enounces the argument :—“ What *appears to all*, that we affirm *to be* ; and he who rejects this *belief*, will, assuredly, advance nothing better worthy of credit.” (Eth. Nie. L. x. c. 2.) As this argument rests entirely on a presumption ; the fundamental condition of its validity is, that this presumption be not disproved. The presumption in favour of the veracity of consciousness, as we have already shown, is redargued by the repugnance of the facts themselves, of which consciousness is the complement ; as the truth of all can only be vindicated on the truth of each. The argument from common sense, therefore postulates, and founds on the assumption—THAT OUR ORIGINAL BELIEFS BE NOT PROVED SELF-CONTRADICTORY.

The harmony of our primary convictions being supposed, and not redargued, the argument from common sense is decisive against every deductive inference not in unison with them. For as every conclusion is involved in its premises, and as these again must ultimately be resolved into some original belief ; the conclusion, if inconsistent with the primary phenomena of consciousness, must, *ex hypothesi*, be inconsistent with its premises, *i. e.* be logically false. On this ground, our convictions *at first hand*, peremptorily derogate from our convictions *at second*. “ If we know and believe,” says Aristotle, “ through certain original principles, we must know and believe these with *paramount certainty*, for the very reason that we know and believe all else through them ;” and he elsewhere observes, that our approbation is often rather to be accorded to what is revealed by nature as actual, than to what can be demonstrated by philosophy as possible :—“ Περσίσχων εὐ δὲ πάντα τοῖς διὰ τῶν λόγων, ἀλλὰ πολλάκις μᾶλλον τοῖς φαινομένοις.” *

* Jacobi (Werke, II. Vorr. p. 11, ets.) following Fries, places Aristotle at the head of that absurd majority of philosophers, who attempt to *demonstrate*

"*Novimus certissima scientia, et clamante conscientia,*" (to apply the language of St Augustin, in our acceptation,) is thus a proposition, either *absolutely true* or *absolutely false*. The argument from common sense, if not omnipotent, is powerless: and in the hands of a philosopher by whom its postulate cannot be allowed, its employment, if not suicidal, is absurd.—This condition of non-contradiction is *unexpressed by Reid*. It might seem to him too evidently included in the very conception of the argument to require enunciation. Brown has proved that he was wrong. Yet Reid could hardly have anticipated, that his whole philosophy, in relation to the argument of common sense, and that argument itself, were so to be mistaken, as to be actually interpreted by contraries.—These principles established, we proceed to their application.

Brown's error, in regard to Reid's doctrine of perception, involves the other, touching the relation of that doctrine to Hume's sceptical idealism. On the supposition, that Reid views in the immediate object of perception a mental modification, and not a material quality, Brown is fully warranted in asserting, that he left the foundations of idealism, precisely as he found them. Let it once be granted, that the object known in perception, is not convertible with the reality existing; idealism reposes in equal security on the hypothesis of a representative perception,—whether the representative imago be a modification of consciousness itself,—or whether it have an existence independent either of mind or of the act of thought. The former indeed as the simpler basis, would be the more secure; and, in point of fact, the egoistical idealism of Fichte, resting on the *third* form of representation, is less exposed to criticism than the theological idealism of Berkeley, which reposes on the *first*. Did Brown not mistake Reid's doctrine, Reid was certainly absurd in thinking, a refutation of idealism to be involved in his refutation of the common theory of perception. So far from blaming Brown, on this supposition, for denying to Reid the *single* merit which that philosopher thought peculiarly his own; we only reproach him for leaving, to Reid and to himself, any possible mode of resisting the idealist at all. It was a monstrous error to reverse Reid's doctrine of perception; but a greater still, not to see that this rever-

every thing. This would not have been more *sublimely false*, had it been said of the German Plato himself. [Dissertations on Reid, p. 771.]

sal stultifies the argument from common sense; and that so far from "*proceeding on safe ground*" in an appeal to our original beliefs, Reid would have employed, as Brown has actually done, a weapon, *harmless to the sceptic, but mortal to himself*.

The belief, says Brown, in the existence of an external world is *irresistible*, therefore it is *true*. On his doctrine of perception, which he attributes also to Reid, this inference is however incompetent, because on that doctrine he cannot fulfil the condition which the argument implies. *I cannot but believe that material things exist:—I cannot but believe that the material reality is the object immediately known in perception*. The former of these beliefs, explicitly argues Brown, in defending his system against the sceptic, *because irresistible, is true*. The latter of these beliefs, implicitly argues Brown, in establishing his system itself, *though irresistible, is false*. And here not only are two primitive beliefs, supposed to be repugnant, and consciousness therefore delusive; the very belief which is assumed as true, exists in fact only through the other, which, *ex hypothesi*, is false. Both in reality are one.*

* This reasoning can only be invalidated either, 1°, By disproving the belief itself of the knowledge, as a fact; or—2°, By disproving its attribute of originality. The latter is impossible; and if possible would also annihilate the originality of the belief of the existence, which is supposed. The former alternative is ridiculous. That we are naturally determined to believe the object known in perception, to be the external existence itself, and that it is only in consequence of a *supposed philosophical necessity*, we subsequently endeavour by an artificial abstraction to discriminate these; is admitted even by those psychologists, whose doctrine is thereby placed in overt contradiction to our original beliefs. Though perhaps superfluous to allege authorities in support of such a point, we refer, however, to the following, which happen to occur to our recollection.—DESCARTES, *De Passionibus*, art. 26.—MALKB-RANCHE, *Recherche*, l. iii. c. 1.—BERKELEY, *Works*, l. p. 216, and quoted by Reid in his *Intellectual Powers*, p. 165.—HUME, *Treatise*, l. pp. 330. 338. 353. 358. 361. 369. orig. ed.—*Essays*, ii. pp. 154. 157. ed. 1788.—As not generally accessible, we translate the following extracts.—SCHELLING (*Ideen zu einer Philosophie der Natur*, Einl. p. xix. 1st ed.)—"When (in perception) I represent an object, object and representation are one and the same. And simply in this, our inability to discriminate the object from the representation during the act, lies the conviction which the common sense of mankind (*gemeine Verstand*) has of the reality of external things, although these become known to it, only through representations." (See also p. xxvi.)—We cannot recover, at the moment, a passage, to the same effect, in Kant; but the ensuing is the testimony of an eminent disciple.—TENNK-MANN, (*Geschichte d. Philosophie*, II. p. 294.) speaking of Plato: "The illusion that things in themselves are cognisable, is so natural, that we need

Kant, in whose doctrine as in Brown's the immediate object of perception constitutes only a subjective phænomena, was too acute, not to discern that, on this hypothesis, philosophy could not, without contradiction, appeal to the evidence of our elementary faiths.—“Allowing idealism,” he says, “to be as dangerous as it truly is, it would still remain a *scandal to philosophy* and human reason in general, to be compelled to accept the existence of external things on the testimony of mere *belief*.” *

But Reid is not like Brown, *felo de se* in his reasoning from our natural beliefs; and on his genuine doctrine of perception, the argument has a very different tendency. Reid asserts that his doctrine of perception is itself a confutation of the ideal system; and so, when its imperfections are supplied, it truly is. For it at once denies to the sceptic and idealist the premises of their conclusion; and restores to the realist, in its omnipotence, the argument of common sense. The sceptic and idealist can only found on the admission, that the *object known* is not convertible with the

not marvel if even philosophers have not been able to emancipate themselves from the prejudice. The common sense of mankind (*gemeine Menschenverstand*) which remains steadfast within the sphere of experience, recognises no distinction between things in themselves [unknown reality existing] and phænomena [representation, object known]; and the philosophizing reason, commences therewith its attempt to investigate the foundations of this knowledge, and to recall itself into system.—See also JACOBI's *David Hume, passim*, (*Werke*, ii.) and his *Allwills Briefsammlung*, (*Werke*, i. p. 119. ets.) Reid has been already quoted.—[*Diss.* p. 747, 748, give other testimonies of a similar purport.]

* *Cr. d. r. V.*—Vorr. p. xxxix. Kant's marvellous acuteness did not however enable him to bestow on his “*Only possible demonstration of the reality of an external world*,” (*ibid.* p. 275, ets.) even a logical necessity; nor prevent his *transcendental*, from being apodeictically resolved (by Jacobi and Fichte) into *absolute*, idealism. In this argument, indeed, he collects more in the conclusion, than was contained in the antecedent; and reaches it by a double *saltus*, overleaping the foundations both of the egoistical and mystical idealists.—Though Kant, in the passage quoted above and in other places, apparently derides the common sense of mankind, and altogether rejects it as a metaphysical principle of truth; he at last, however, found it necessary (in order to save philosophy from the annihilating energy of his *Speculative Reason*) to rest on that very principle of an ultimate belief, (which he had originally spurned as a basis even of a material reality), the reality of all the sublimest objects of our interest—God, Free Will, Immortality, &c. His *Practical Reason*, as far as it extends, is, in truth, only another (and not even a better) term for *Common Sense*.—Fichte, too, escaped the *admitted nihilism* of his speculative philosophy, only by a similar inconsequence in his practical.—(See his *Bestimmung des Menschen*.) “*Naturam expellas furca*,” &c.

reality existing; and, at the same time, this admission, by placing the facts of consciousness in mutual contradiction, denies its postulate to the argument from our beliefs. Reid's analysis therefore in its result,—THAT WE HAVE, AS WE BELIEVE WE HAVE, AN IMMEDIATE KNOWLEDGE OF THE MATERIAL REALITY,—accomplished every thing at once.*

Brown is not, however, more erroneous in thinking that the argument from common sense *could* be employed by him, than in supposing that its legitimacy, as so employed, *was* admitted by Hume. So little did he suspect the futility, in his own hands, of this proof, he only regards it as superfluous, if opposed to that philosopher, who, he thinks, in allowing the belief in the existence of matter to be *irresistible*, allows it to be *true*. (Lect. xxviii, p. 176.) Brown has committed, perhaps, more *important* mistakes than this, in regard to scepticism and to Hume;—none certainly more *fundamental*. Hume is converted into a dogmatist; the essence of scepticism is misconceived.

On the hypothesis *that our natural beliefs are fallacious*, it is not for the Pyrrhonist to reject, but to establish their authenticity; and so far from the admission of their strength being a surrender of his doubt, the very triumph of scepticism consists in proving them to be *irresistible*. By what demonstration is the foundation of all certainty and knowledge so effectually subverted, as by showing that the principles, which reason constrains us speculatively to admit, are contradictory of the facts, which our instincts compel us practically to believe? Our intellectual nature is thus seen to be divided against itself; consciousness stands self-convicted of delusion. "Surely we have eaten the fruit of lies!"

This is the scope of the "Essay on the Academical or Sceptical Philosophy," from which Brown quotes. In that essay, previous to the quotation, Hume shows, on the admission of philosophers, that our *belief in the knowledge* of material things, *as impossible is false*; and on this admission, he had irresistibly established the *speculative* absurdity of our belief in the existence of an external world. In the passage, on the contrary, which Brown *partially* extracts, he is showing that this idealism, which in

* [This is spoken too absolutely. Reid I think was correct in the aim of his philosophy; but in the execution of his purpose he is often at fault, often confused, and sometimes even contradictory. I have endeavoured to point out and to correct these imperfections in the edition which I have not yet finished of his works.]

theory must be admitted, is in *application* impossible. Speculation and practice, nature and philosophy, sense and reason, belief and knowledge, thus placed in mutual antithesis, give, as their result, the uncertainty of every principle; and the assertion of this uncertainty is—*Scepticism*. This result is declared even in the sentence, with the preliminary clause of which, Brown abruptly terminates his quotation.

But allowing Brown to be correct in transmuting the sceptical nihilist into a dogmatic realist; he would still be wrong (on the supposition that Hume admitted the *truth* of a belief to be convertible with its *invincibility*) in conceiving, on the one hand, that Hume could ever acquiesce in the same inconsequent conclusion with himself; or, on the other, that he himself could, without an abandonment of his system, acquiesce in the legitimate conclusion. On this supposition, Hume could only have arrived at a similar result with Reid; there is no tenable medium between the *natural realism* of the one and the *sceptical nihilism* of the other.—“Do you follow,” says Hume in the same Essay, “the instincts and propensities of nature in assenting to the veracity of sense?”—I do, says Brown. (Lect. xxviii. p. 176. *alibi*.)—“But these,” continues Hume, “lead you to believe that the *very perception or sensible image is the external object*. Do you *disclaim this principle* in order to embrace a more rational opinion, that the perceptions are only representations of something external?”—It is the vital principle of my system, says Brown, that the mind knows nothing beyond its own states (Lectt. *passim*); philosophical suicide is not my choice; I must recall my admission, and give the lie to this natural belief.—“You here,” proceeds Hume, “depart from your natural propensities and more obvious sentiments; and yet are not able to satisfy your reason, which can never find any convincing argument from experience to prove, that the perceptions are connected with any external objects.”—I allow, says Brown, that the existence of an external world cannot be proved by *reasoning*, and that the sceptical argument admits of no logical reply. (Lect. xxviii. p. 175.)—“But” (we may suppose Hume to conclude) “as you truly maintain that the confutation of scepticism can be attempted only in *two ways* (*ibid.*),—either by showing that its arguments are inconclusive, or by opposing to them, as paramount, the evidence of our natural beliefs,—and as you now, voluntarily or by compulsion, abandon

both; you are confessedly reduced to the dilemma, either of acquiescing in the conclusion of the sceptic, or of refusing your assent upon no ground whatever. *Pyrrhonism* or *absurdity*?—choose your horn."

Were the scepticism into which Brown's philosophy is thus analysed, confined to the negation of matter, the result would be comparatively unimportant. The transcendent reality of an outer world, considered absolutely, is to us a matter of supreme indifference. It is not the idealism itself that we must deplore; but the mendacity of consciousness which it involves. Consciousness, once convicted of falsehood, an unconditional scepticism, in regard to the character of our intellectual being, is the melancholy, but only rational, result. Any conclusion may now with impunity be drawn against the hopes and dignity of human nature. Our *Personality*, our *Immateriality*, our *Moral Liberty*, have no longer an argument for their defence. "Man is the dream of a shadow;" God is the dream of that dream.

Brown, after the best philosophers, rests the proof of our *personal identity*, and of our *mental individuality*, on the ground of *beliefs*, which, as "intuitive, universal, immediate, and irresistible," he not unjustly regards as "the internal and never-ceasing voice of our Creator,—revelations from on high, omnipotent [and veracious] as their author." To him this argument is however incompetent, as contradictory.

What we know of *self* or *person*, we know, only as given in consciousness. In our perceptive consciousness there is revealed as an ultimate fact a *self* and a *not-self*; each given as independent,—each known only in antithesis to the other. No belief is more "*intuitive, universal, immediate, or irresistible*," than that this antithesis is real and known to be real; no belief therefore is more true. If the antithesis be illusive, *self* and *not-self*, *subject* and *object*, *I* and *Thou* are distinctions without a difference; and consciousness, so far from being "the internal voice of our Creator," is shown to be, like Satan, "a liar from the beginning." The reality of this antithesis in *different parts* of his philosophy Dr Brown *affirms and denies*.—In establishing his theory of perception, he articulately denies, that mind is conscious of aught beyond itself; virtually asserts, that what is there given in consciousness as *not-self*, is only a phænomenal illusion,—a modification of *self*, which our consciousness determines us to believe the quality of

something numerically and substantially different. Like Narcissus again, he must lament,—

“*Ille ego sum sensi, sed me mea fallit imago.*”

After this implication in one part of his system, that our belief in the distinction of self and not-self is nothing more than the deception of a lying consciousness; it is startling to find him, in others, appealing to the beliefs of this same consciousness as to “revelations from on high;”—nay, in an especial manner alleging “as the voice of our Creator,” this very faith in the distinction of self and not-self, through the fallacy of which, and of which alone, he had elsewhere argued consciousness of falsehood.

On the *veracity* of this *mendacious* belief, Brown establishes his proof of our *PERSONAL IDENTITY*. (Lect. xii.—xv.) Touching the object of perception, when its evidence is *inconvenient*, this belief is quietly passed over as incompetent to distinguish *not-self from self*; in the question regarding our personal identity, where its testimony is *convenient*, it is clamorously cited as an inspired witness, exclusively competent to distinguish *self from not-self*. Yet, why, if, in the one case, it mistook *self* for *not-self*, it may not, in the other, mistake *not-self* for *self*, would appear a problem not of the easiest solution.

The same belief, with the same inconsistency, is again called in to prove the *INDIVIDUALITY OF MIND*. (Lect. xvi.) But if we are fallaciously determined, in perception, to believe what is supposed *indivisible, identical, and one*, to be *plural and different and incompatible*, ($\text{self} = \text{self} + \text{not-self}$); how, on the authority of the same treacherous conviction, dare we maintain, that the *phenomenal unity of consciousness* affords a guarantee of the *real simplicity of the thinking principle*? The materialist may now contend, without fear of contradiction, that *self* is only an *illusive phenomenon*; that our consecutive identity is that of the Delphic ship, and our present unity merely that of a system of co-ordinate activities. To explain the phenomenon, he has only to suppose, as certain theorists have lately done, an organ to tell the lie of our personality; and to quote as authority for the lie itself, the perfidy of consciousness, on which the theory of a representative perception is founded.

On the hypothesis of a representative perception, there is, in fact, no salvation from materialism, on the one side, short of idealism—scepticism—nihilism, on the other. Our knowledge of

mind and *matter*, as substances, is merely relative; they are known to us only in their qualities; and we can justify the postulation of *two different substances*, exclusively on the supposition of the incompatibility of the double series of phenomena to coinhere in *one*. Is this supposition disproved?—the presumption against dualism is again decisive. “*Entities are not to be multiplied without necessity*;”—“*A plurality of principles is not to be assumed where the phenomena can be explained by one*.” In Brown’s theory of perception, he abolishes the incompatibility of the two series; and yet his argument, as a dualist, for an immaterial principle of thought, proceeds on the ground, that this incompatibility subsists. (Lect. xvi. pp. 646, 647.) This philosopher denies us an immediate knowledge of aught beyond the accidents of mind. The accidents which we refer to body, as known to us, are only states or modifications of the percipient subject itself; in other words, the qualities we call *material*, are known by us to *exist*, only as they are known by us to *inhere in the same substance as the qualities we denominate mental*. There is an *apparent* antithesis, but a *real identity*. On this doctrine, the hypothesis of a double principle losing its necessity, becomes philosophically absurd; and on the law of parsimony, a psychological unitarianism, at best, is established. To the argument, that the qualities of the *object* are so repugnant to the qualities of the *subject* of perception, that they cannot be supposed the accidents of the same substance; the unitarian—whether materialist, idealist, or absolutist—has only to reply: that so far from the attributes of the object, being exclusive of the attributes of the subject, in this act; the hypothetical dualist himself establishes, as the fundamental axiom of his philosophy of mind, *that the object known is universally identical with the subject knowing*. The materialist may now derive the subject from the object; the idealist derive the object from the subject; the absolutist sublimate both into indifference; nay, the nihilist subvert the *substantial* reality of either:—the hypothetical realist so far from being able to resist the conclusion of any, in fact accords their assumptive premises to all.

The same contradiction would, in like manner, invalidate every presumption in favour of our LIBERTY OF WILL. But as Brown throughout his scheme of Ethics advances no argument in support of this condition of our moral being, which his philosophy otherwise tends to render impossible, we shall say nothing of this consequence of hypothetical realism.

So much for the system, which its author fondly imagines, "*allows to the sceptic no resting-place for his foot,—no fulcrum for the instrument he uses :*" so much for the doctrine which Brown would substitute for Reid's ;—nay, which he even supposes Reid himself to have maintained.

"SCILICET, HOC TOTUM FALSA RATIONE RECEPTUM EST!" *

* [In this criticism I have spoken only of Dr Brown's mistakes, and of these, only with reference to his attack on Reid. On his appropriating to himself the observations of others, and in particular those of Destutt Tracy, I have said nothing, though an enumeration of these would be necessary to place Brown upon his proper level. That, however, would require a separate discussion.]

III.—JOHNSON'S TRANSLATION OF TENNEMANN'S MANUAL OF THE HISTORY OF PHILOSOPHY.

(OCTOBER, 1832.)

A Manual of the History of Philosophy; translated from the German of TENNEMANN. By the Rev. ARTHUR JOHNSON, M.A., late Fellow of Wadham College. 8vo. Oxford: 1832.

WE took up this translation with a certain favourable prepossession, and felt inclined to have said all we conscientiously could in its behalf: but alas! never were expectations more completely disappointed; and we find ourselves constrained exclusively to condemn, where we should gladly have been permitted only to applaud.

We were disposed to regard an English version of Tennemann's minor History of Philosophy—his "*Grundriss*," as a work of no inconsiderable utility—if competently executed; but in the present state of philosophical learning in this country we were well aware, that few were adequate to the task, and of those few we hardly expected that any one would be found so disinterested, as to devote himself to a labour, of which the credit stood almost in an inverse proportion to the trouble. Few works, indeed, would prove more difficult to a translator. A complete mastery of the two languages, in a philological sense, was not enough. There was required a comprehensive acquaintance with philosophy in general, and, in particular, an intimate knowledge of the philosophy of Kant. Tennemann was a Kantian; he estimates all opinions by a Kantian standard; and the language which he employs is significant only as understood precisely in a Kantian application. In stating this, we have no intention of disparaging the intrinsic value of the work, which, in truth, with all its defects, we highly esteem as the production of

a sober, accurate, and learned mind. Every historian of philosophy must have his system, by reference to which he criticises the opinions of other thinkers. Eclecticism, as opposed to systematic philosophy, is without a meaning. For either the choice of doctrines must be determined by some principle, and that principle then constitutes a system; or the doctrines must be arbitrarily assumed, which would be the negation of philosophy altogether. (We think therefore that M. Cousin, in denominating his scheme distinctively the *eclectic*, has committed an act of injustice on himself.) But as it was necessary that Tennemann should be of some school,—should have certain opinions,—we think it any thing but a disadvantage that he was of the Kantian. The Critical Philosophy is a comprehensive and liberal doctrine; and whatever difference may subsist with regard to its positive conclusions, it is admitted, on all hands, to constitute, by its negative, a great epoch in the history of thought. An acquaintance with a system so remarkable in itself, and in its influence so decisive of the character of subsequent speculation, is now a matter of necessity to all who would be supposed to have crossed the threshold of philosophy. The translation of a work of merit like the present, ought not therefore to be less acceptable to the English reader, because written in the spirit and language of the Kantian system;—provided, he be enabled by the translator to understand it. But what does this imply? Not merely that certain terms in the German should be rendered by certain terms in the English; for few philosophical words are to be found in the latter, which suggest the same analyses and combinations of thought as those embodied in the technical vocabulary of the former. The language of German philosophy has sometimes three or four expressions, precisely distinguishing certain generalizations or abstractions; where we possess only a single word, comprehensive of the whole, or, perhaps, several, each vaguely applicable to all or any. In these circumstances a direct translation was impossible. The translator could only succeed by coming to a specific understanding with his reader. He behaved, in the first place, clearly to determine the value of the principal terms to be rendered; which could only be accomplished through a sufficient exposition of that philosophy whose peculiar analyses these terms adequately expressed. In the second place, it was incumbent on him to show in what respects the approximating English term was not exactly equivalent to the original; and precisely to define

the amplified or restricted sense, in which, by accommodation to the latter, the former was in his translation specially to be understood.

At the same time it must be remembered, that the *Grundriss* of Tennemann was not intended by its author for an independent treatise. It is merely a *manual* or *text-book*; that is, an outline of statements to be filled up, and fully illustrated in lectures;—a text-book also for the use of students, who, from their country and course of education, were already more or less familiar with the philosophy of the German schools. In translating this work as a system intended to be complete *per se*, and in favour of a public unlearned in philosophical discussion, and utterly ignorant of German metaphysics, a competent translator would thus have found it necessary, in almost every paragraph, to supply, to amplify, and to explain. M. Cousin, indeed, when he condescended to translate this work, (we speak only from recollection and a rapid glance,) limited himself to a mere translation. But by him the treatise was intended to be only subordinate to the history of speculation delivered in his lectures; and was addressed, among his countrymen, to a numerous class of readers, whose study of philosophy, and of German philosophy, he had himself powerfully contributed to excite. The fact, indeed, of a French translation by so able an interpreter, was of itself sufficient to render a simple version of the work into another European tongue nearly superfluous; and we were prepared to expect, that, if translated into English, something more would be attempted, than what had been already so well executed in a language with which every student of philosophy is familiar.

It was, therefore, with considerable interest, that we read the announcement of an English translation, by a gentleman distinguished for learning among the Tutors of Oxford; whose comparative merit, indeed, had raised him to several of the most honourable and important offices in the nomination of the two "Venerable Houses." Independently of its utility, we hailed the publication as a symptom of the revival, in England, of a taste for philosophical speculation; and this more especially, as it emanated from that University in which, (since its legal constitution had been subverted, and all the subjects taught reduced to the capacity of one self-elected teacher,) Psychology and Metaphysics, as beyond the average comprehension of the College Fellows, had remained not only untaught, but their study discouraged, if not

formally proscribed. A glance at Mr Johnson's preface confirmed us in our prepossessions. We were there, indirectly, indeed, but confidently, assured of his intimate acquaintance with philosophy in general, and German philosophy in particular; nor were we allowed to remain ignorant of the translator's consciousness that he might easily have become the rival of his author. "As far," he says, "as it appeared possible, I have preserved the technical expressions of my author, subjoining for the most part an explanation of their meaning, for the benefit of those English readers who may not have plunged into the profound abyss of German metaphysics;"—the expositor himself having of course so plunged. "Whenever," he adds, "it has appeared to be that an observation of my author was of a nature impossible to be apprehended by any but a scholar long familiar with the disputes of the German lecture-rooms, I have endeavoured to express the sense of it in other words;"—necessarily implying that the interpreter himself was thus familiar. And again:—"There are parts of Tennemann, which on this account I had much rather have composed anew than translated, particularly the Introduction."

The examination of a few paragraphs of the work, however, proved the folly of our expectations. We found it to be a bad translation; and one concentrating every possible defect. We discovered, in the *first* place, that the translator was but superficially versed in the German language;—in the *second*, that he was wholly ignorant even of the first letter in the alphabet of German philosophy;—in the *third*, that he was almost equally unacquainted with every other philosophy, ancient and modern;—in the *fourth*, that he covertly changes every statement of his author which he may not like;—in the *fifth*, that he silently suppresses every section, sentence, clause, word he is suspicious of not understanding;—and in the *sixth*, that he reviles, without charity, the philosophy and philosophers he is wholly incapable of appreciating.—Instead of being of the smallest assistance to the student of philosophy, the work is only calculated to impede his progress, if not at once to turn him from the pursuit. From beginning to end, all is vague or confused, unintelligible or erroneous. We do not mean to insinuate that it was so intended. (albeit the thought certainly did strike us,) but, in point of fact, this translation is admirably calculated to turn all metaphysical speculation into contempt. From the character of the work, from the celebrity of its author and of its French translator, and even from the

academical eminence of Mr Johnson himself, his version would be probably one of the first books resorted to by the English student, for information concerning the nature and progress of philosophical opinions. But in proportion as the inquirer were capable of thinking, would philosophy, as here delineated, appear to him incomprehensible; and in proportion as he respected his source of information, would he either despair of his own capacity for the study, or be disgusted with the study itself. It is, indeed, by reason of the serious injury which this translation might occasion to the cause of philosophy in this country, that we find it imperative on us, by annihilating its authority, to deprive it of the power to hurt.

But let us be equitable to the author while executing justice on his work. This translation is by no means to be taken as a test of the general talent or accomplishment of the translator. He has certainly been imprudent, in venturing on an undertaking, for which he was qualified, neither by his studies, nor by the character of his mind. That he should ever conceive himself so qualified, furnishes only another proof of the present abject state of philosophical erudition in this country; for it is less to be ascribed to any overweening presumption in his powers, than to the lamentable lowness of the standard by which he rated their sufficiency. What Mr Johnson has executed ill, there are probably not six individuals in the British empire who could perform well.—But to the proof of our assertions.

That Mr Johnson, though a quondam Professor of ancient Saxon, is still an under-graduate in modern *German*, will, without special proof, be sufficiently apparent in the course of our criticism.

Of his ignorance of the *Kantian philosophy*, in the language of which the work of Tennemann is written, every page of the translation bears ample witness. The peculiarities of this language are not explained; nay, the most important sections of the original, from which, by a sagacious reader, these might have been partially divined, are silently omitted, or professedly suppressed as unintelligible. (*E. g.* § 41.) Terms in the original, correlative and opposed, are, not only not translated by terms also correlative and opposed, but confounded under the same expression, and, if not rendered at random, translated by the rule of contraries. To take, for example, the mental operations and their objects. In a few pages we have examined, we find among

other errors, *Vernunft* (Reason), though strictly used in its proper signification as opposed to *Verstand*, rendered sometimes by "Reason," but more frequently by "Understanding" or "Intellect;" and *Verstand* (Understanding), in like manner, specially used in opposition to *Vernunft*, translated indifferently by "Understanding" or "Reason."*—*Vorstellung* (Representation), the genus of which *Idee*, *Begriff*, *Anschauung* are species, is translated "Perception," "Idea," "Apprehension," "Impression," "Thought," "Effort," &c.—*Begriff* (Notion, Concept),† the object of the Understanding, as opposed to *Idee* (Idea), the object of the Reason, is commonly translated "Idea," (and this also in treating of the Aristotelian and Kantian philosophies, in which this term has a peculiar meaning very different from its Cartesian universality,) sometimes "Opinion," "Character;" *Idee der Vernunft* (Idea of Reason) is rendered by "object of Understanding;" and *Zweck der Vernunft*, (scope or end of Reason,) by "mental object."—Lastly, *Anschauung* (immediate object or Perception or Imagination) is expressed by "*mental Conception*," "*Perception*," &c.—Yet Mr Johnson professes, "as far as it appeared possible, to have preserved the technical expressions of his author"! But of this more in the sequel.

Of our translator's knowledge of *philosophy in general*, a specimen may be taken from the few short notes of explanation he has appended. These for the most part say, in fact, nothing, or are merely an echo of the text; where they attempt more, they are uniformly wrong. Take, for example, the two first. At p. 55, on the words *Syncretism* and *Mysticism*, we have this luminous annotation: "The force of these terms, as used by the author, will be sufficiently explained in the course of the work. *Transl.*"

* By the time he is half through the work, our translator seems to have become aware that the Kantians "make a broad distinction between the Understanding and Reason." The discovery, however, had no beneficial effect on his translation.—[Since this was written, we have had in English two editions of an excellent version of Kant's great work, his "*Critick of Pure Reason*;" by Mr Francis Haywood. The work is all that could be wished; the text very accurate, and the notes very instructive. It, in fact, puts to shame the attempts which are too frequently made in this country, to obtain without effort an acquaintance with the Kantian system; and must afford the greatest assistance to English students of philosophy.]

† It will be seen that we do not employ Conception in the meaning attached to it by Mr Stewart.

At p. 70, (and on a false translation,) there is the following note, which, though not marked as the translator's, at once indicates its source: "Idealism is used to denote the theory which asserts the reality of our Ideas,* and from those argues the reality of external objects.† Pantheism is the opinion that all nature partakes of the divine essence."‡—To this head we may refer the author's continual translation of *Philosophie* by "Moral Philosophy," which he tells us is convertible with Metaphysics in general; his use of the word "Experimentalism" for Empirism, Philosophy of Experience or of Observation; to say nothing of the incorrectness and vacillation of his whole technical language criticised by any standard.—Under this category may be also mentioned the numerous and flagrant errors in philosophical history. For example, *Joseph Priestley* (*als Physiker berühmte*) is called "the celebrated Physician;" and *Ancillon* (*père*), thus distinguished from his son, the present Prussian prime Minister, himself a distinguished philosopher, is converted from a Calvinist pastor, to a Catholic priest—"Father Ancillon."

But lest we should be supposed to have selected these defects, we shall vindicate the rigid accuracy of our strictures by a few extracts. We annex to each paragraph a *literal translation*, not such, assuredly, as we should offer, were we to attempt a complete version of the original, but such as may best enable the English reader to compare Mr Johnson and Tennemann together. We find it convenient to make our observations in the form of *notes*: in these we pass over much that is imperfect, and can notice only a few of the principal mistakes. We cannot, of course, hope to be fully understood except by those who have some acquaintance with German philosophy.—We shall first quote paragraphs from the Introduction.

Johnson's Version, § 1.—"A history of philosophy, to be complete,§ demands a preliminary enquiry respecting the character of this science, as well

* The stoutest sceptic never doubted that we are really conscious of what we are conscious,—he never doubted the subjective reality of our ideas: the doubt would annihilate itself.

† We had always imagined the proving the reality of external objects to be the negation of Idealism—Realism.

‡ Pantheism, however, is the very denial of such participation; it asserts that "all nature" and the "divine essence" are not two, one partaking of the other, but one and the same.

§ "Complete," inaccurate; original, *Zurvermuthung*.

as respecting its subject-matter,* its form and object;† and also its extent or comprehensiveness, its method, its importance, and the different ways in which it may be treated. All these particulars, with the bibliôgraphy belonging to it, will form, together with some previous observations on the progress of philosophical research,‡ the subject of a *general* introduction.” — — —

Literal Translation, § 1.—“The history of philosophy, if handled in conformity to the end in view, presupposes an inquiry touching the conception of the science, conjoining a view of its contents, form, and end, as also of its compass, method, importance, and the various modes in which it may be treated. These objects, along with the history and literature of the history of philosophy, combined with some preparatory observations on the progress of the philosophizing reason, afford the contents of a *general* introduction to the history of philosophy.” — — —

Johnson's Version, § 2.—“The human mind has a tendency to attempt to enlarge the bounds of its knowledge, and gradually to aspire to a clear development of the laws and relations of nature, and of its own operations.¶ At first it does nothing more than obey a blind desire, without accounting to itself sufficiently for this instinctive impulse of the understanding,¶ and

* “Subject-matter;” original, *Inhalt*, i. e. contents, the complement of objects. Subject or Subject-matter is the *materia subjecta* or *in qua*; and if employed for the object, *materia objecta* or *circa quam*, is always an abuse of philosophical language, though with us unfortunately a very common one. But to commute these terms in the translation of a Kantian Treatise, where *subject* and *object*, *subjective* and *objective*, are accurately contradistinguished, and where the distinction forms, in fact, the very cardinal point on which the whole philosophy turns, is to convert light into darkness, order into chaos.

† “Object;” original, *Zweck*, end, aim, scope. The unphilosophical abuse of the term *object* for *end* is a comparatively recent innovation in the English and French languages. Culpable at all times, on the present occasion it is equally inexcusable as the preceding.

‡ “Philosophic Research.” The translation is a vague and unmeaning version of a precise and significant original—*philosophirende Vernunft*. (See § 2.)

¶ This sentence is mangled, and wholly misunderstood. “The end of philosophy,” says Trismegistus, “is the intuition of unity;” and to this tendency of speculation towards the absolute—to the intensive completion in unity, and not to the extensive enlargement to infinity, of our knowledge, does Tennemann refer. The latter is not philosophy in his view at all. In the translation, *Vernunft* (Reason), the faculty of the absolute in Kant's system, and here used strictly in that sense, is diluted into “Mind;” and the four grand Categories are omitted, according to which reason endeavours to carry up the knowledge furnished through the senses and understanding, into the unconditioned.

¶ “Understanding;” just the reverse—“Reason;” original, *Vernunft*. The author and his translator are in these terms, always at cross-purposes. “Instinctive impulse of the understanding” is also wrong in itself, and wrong as a translation. The whole sentence, indeed, as will be seen from our version, is one tissue of error.

without knowing the appropriate means to be employed, or the distance by which it is removed from its object. Insensibly this impulse becomes more deliberate, and regulates itself in proportion to the progress of the understanding,* which gradually becomes better acquainted with itself. Such a deliberate impulse is what we call philosophy.†

Literal Translation, § 2.—“Man, through the tendency of his Reason (Vernunft), strives after a systematic completion (Vollendung) of his knowledge considered in Quantity, Quality, Relation and Modality, and consequently endeavours to raise himself to a science of the ultimate principles and laws of Nature and Liberty, and of their mutual relations. To this he is at first impelled by the blind feeling of a want; he forms no adequate appreciation of the problem thus proposed by reason; and knows not by what way, through what means, or to what extent, the end is to be attained. By degrees his efforts become more reflective, and this in proportion to the gradual development of the self-consciousness of reason. This reflective effort we denominate the act of *philosophizing*.”

Johnson's Version, § 3.—“Thereupon arise various attempts to approximate this mental object of the understanding,‡ attempts more or less differing in respect of their principles, their methods, their consequences,|| their extent, and, in general, their peculiar objects. In all these attempts, (which take the name of *Philosophic Systems*, when they present themselves in a scientific form, and the value of which is proportionate to the degree of intelligence manifested by each particular philosopher,) we trace the gradual development of the human understanding,¶ according to its peculiar laws.”

Literal Translation, § 3.—“Out of this effort arise the various attempts of thinkers to approximate to this Idea of reason, or to realize it in thought; attempts more or less differing from each other in principle, in method, in logical consequence, in result, and in the comprehension and general character of their objects. In these attempts (which, when they present themselves in a form scientifically complete, are denominated *philosophic systems*, and possess a value, varying in proportion to the pitch of intellectual cultivation, and to the point of view of the several speculators) the thinking reason develops itself in conformity to its peculiar laws.”

Johnson's Version, § 4.—“But the development of human reason is itself subject to external conditions, and is sometimes seconded, sometimes retarded, or suspended, according to the different impressions it receives from without.”**

* “Understanding;” the same error; “Reason.” The whole sentence is ill rendered.

† “Philosophy;” *das Philosophiren*, not philosophy vaguely, but precisely, philosophic act—philosophizing.—*Streben* here, and before, is also absurdly translated “impulse;” a “deliberate impulse!” a round square!

‡ “Object of the Understanding;” the opposite again; original, *Idee der Vernunft*.

|| “Consequences;” wrong; *Consequenz*.

¶ “Understanding,” usual blunder for Reason, and twice in this §. It is so frequent in the sequel, that we cannot afford to notice it again. The whole paragraph is in other respects mutilated, and inaccurately rendered.

** Mangled and incorrect.

Literal Translation, § 4.—“But the development of human reason does not take place without external excitement; it is consequently dependent upon external causes, in as much as its activity through the different direction given it from without, is now promoted in its efforts, now checked and held back.”

Johnson's Version, § 5.—“To give an account of the different works produced by the understanding, thus in the progress of improvement, and favoured or impeded by external circumstances, is, in fact, to compose a history of philosophy.”*

Literal Translation, § 5.—“An account of the manifold efforts made to realize that Idea of reason (§ 2) in Matter and Form, (in other words, to bring philosophy as a science to bear,) efforts arising from the development of reason, and promoted or held in check by external causes—constitutes, in fact, the History of Philosophy.”

Johnson's Version, § 6.—“The subject-matter† of the history of philosophy, is both external and internal. The internal or immediate embraces, 1. The efforts continually made by the understanding to attain to a perception of the first principles of the great objects of its pursuit, (§ 2,) with many incidental details relating to the subject of investigation, the degree of ardour or remissness which from time to time have prevailed; with the influence of external causes to interest men in such pursuits, or the absence of them.‡ 2. The effects of philosophy, or the views, methods, and systems it has originated; effects varying with the energies out of which they sprang. In these we see the understanding avail itself of materials perpetually accumulating towards constituting philosophy a science, or rules and principles for collecting materials to form a scientific whole; or finally, maxims relating to the method to be pursued in such researches.¶ 3. And lastly: We observe the development of the understanding as an instrument of philosophy, that is to say, the progress of the understanding towards researches in which it depends solely on itself; in other words, its gradual progress towards the highest degree of independence; a progress which may be observed in individuals, in nations, and in the whole race of man.”¶

Literal Translation, § 6.—“The matter about which the history of philosophy is conversant, is consequently both *internal* and *external*. The *internal* or proximate matter, comprehends, in the first place, the continued *application of reason* to the investigation of the ultimate principles and laws of Nature and Liberty; for therein consists the act of *philosophising* (§ 2). And here are to be observed great differences in regard to subject and object—to the extensive application and intensive force of the philosophising energy—to internal aims and motives (whether generous or interested)—as likewise to external causes and occasions. It comprehends, secondly, the *products*

* Mangled and incorrect.

† “Subject-matter;” *Stoff*, matter, or object-matter: see note on § 1.

‡ The whole sentence execrable in all respects; we cannot criticise it in detail.

¶ In this sentence there are *nine* errors, besides imperfections.

¶ In this sentence, what is suffered to remain is worse treated than what is thrown out.

of the philosophising act, in other words, *philosophic views, methods, and systems*, (§ 3,) which are as manifold as the efforts out of which they spring. Through these reason partly obtains materials becoming gradually purer, for philosophy as science, partly rules and principles by which to bind up these materials into a scientific whole, partly, in fine, maxims for our procedure in the search after philosophy. Thirdly, it comprehends the *development of reason*, as the instrument of philosophy, *i. e.* the excitation of reason to spontaneous inquiry, in conformity to determined laws through internal inclination, and external occasion, and herein the gradual progress manifested by individuals, nations, and the thinking portion of mankind. This therefore constitutes an important anthropological phasis of the history of philosophy."

Johnson's Version, § 7.—"The external matter consists in the causes, events, and circumstances which have influenced the development of philosophic reason, and the nature of its productions. To this order of facts belong: 1. The individual history of philosophers, that is to say, the degree, the proportion, and the direction of their intellectual powers; the sphere of their studies and their lives, the interests which swayed them, and even their moral characters.* 2. The influence of external causes, that is to say, the character and the degree of mental cultivation prevalent in the countries to which they belonged; the prevailing spirit of the times; and, to descend still farther, the climate and properties of the country; its institutions, religion and language.† 3. The influence of individuals in consequence of the admiration and imitation they have excited, by their doctrines or example; an influence which betrays itself in the matter as well as in the manner of their schools."‡ (Bacon, Locke, Leibnitz.)

Literal Translation, § 7.—"The *external matter* consists in those causes, events, and circumstances, which have exerted an influence on the development of the philosophising reason, and the complexion of its productions. To this head belong, in the first place, the individual genius of the philosopher, *i. e.* the degree, the mutual relation, and the direction of his intellectual faculties, dependent thereon his sphere of view and operation, and the interest with which it inspires him, and withal even his moral character. In the second place, the influence of external causes on individual genius, such as the character and state of cultivation of the nation, the dominant spirit of the age, and less proximately the climate and natural qualities of the country, education, political constitution, religion and language. In the third place, the effect of individual genius itself (through admiration and imitation, precept and example) on the interest, the direction, the particular objects, the kind and method of the subsequent speculation—an influence variously modified in conformity to intellectual character, to the consideration and celebrity of schools established, to writings, their form and their contents." (Bacon, Locke, Leibnitz.)

Johnson's Version, § 9.—"History in general is distinguished, when pro-

* In this sentence there are *four* inaccuracies.

† In this sentence there are *two* omissions, one essential to the meaning, and *one* inaccuracy.

‡ Compare the literal version!

perly so called, from Annals, Memoirs, &c., by its form: *i. e.* by the combination of its incidents, and their circumstantial development." *

Literal Translation, § 9.—"History, in the stricter signification, is distinguished by reference to its *form*, from mere annals, memoirs, &c., through the concatenation of events, and their scientific exposition," [*i. e.* under the relation of causes and effects.]

Passing now to the body of the book:—we shall first take a paragraph from the account of *Aristotle's* philosophy, in which an Oxford Tutor and Examining Master may be supposed at home. With the exception, however, of four popular treatises, we suspect that the Stagirite is as little read or understood in Oxford, as in Edinburgh.

Johnson's Version, § 140.—"Aristotle possessed in a high degree the talents of discrimination and analysis, added to the most astonishing knowledge of books,† and the works of Nature. To the latter, more especially, he had devoted himself. He rejected the doctrine of ideas; maintaining that all our impressions and thoughts, and even the highest efforts‡ of the understanding, are the fruit of experience; that the world is eternal, even in its *form*, and not the work of a creative providence. In the theory of composition he drew a distinction between the *matter*, which he referred to philosophy, and the *form*, which he derived from poetry.¶ Instead of following his master in his way of reasoning from the universal to the particular, he always takes the opposite course, and infers the first from the latter. His writings contain valuable remarks on the systems of his predecessors; his *own* being that of Empiricism, modified in a slight degree by the Rationalism of Plato."

* Circumstantial development; *pragmatische Darstellung*. No word occurs more frequently in the historical and philosophical literature of Germany and Holland, than *pragmatisch*, or *pragmaticus*, and *Pragmatismus*. So far from *pragmatisch* being tantamount to "circumstantial," and opposed (see § 12 of translation) to "scientific," the word is peculiarly employed to denote that form of history, which, neglecting circumstantial details, is occupied in the scientific evolution of causes and effects. It is, in fact, a more definite term than the *histoire raisonnée* of the French. The word in this signification was originally taken from Polybius; but founded, as is now acknowledged, on an erroneous interpretation. (See Schweighauser ad Polyb. L. i. c. 2.—C. D. Beckii Diss. *Pragmaticæ Historiæ apud veteres ratio et iudicium*,—and Borgeri *Oratio de Historia Pragmatica*.)

† Tennemann does not make Aristotle a bibliographer.

‡ The question of origin refers not to the subjective efforts of our faculties, but to the objective knowledge about which these efforts are conversant. The sentence is otherwise mutilated, and its sense destroyed.

¶ What this may possibly mean we confess ourselves at a loss to guess. Is it an attempt at translating some interpolation of Wendt in the *last* edition of the *Grundriss*?—ours is the *fourth*. It cannot surely be intended for a version of what is otherwise omitted by Mr Johnson.

Literal Translation, § 140.—“Aristotle possessed in a high degree the talent of discrimination, and an extensive complement of knowledge derived from books, and from his own observation of nature. The investigation of nature was, indeed, his peculiar aim. He consequently rejected Ideas, and admitted that all mental representations (*Vorstellungen*.) even the highest of the understanding, are, as to their matter *given*, being elaborated out of experience; and that the universe is eternal even in its form, and not fashioned by a plastic intelligence. He had not a genius (*Sinn*) like Plato for the Ideal [the object of reason proper] but was more the *philosopher of the understanding* (*Verstand*); one, who in his intellectual system (*Verstandssystem*)—an Empirism modified by Plato's Rationalism—did not, like that philosopher, proceed from the universal to the particular, but from the particular to the universal.”

Johnson's Version, § 145.—“Physiology (*sic*) is indebted to Aristotle for its first cultivation; for an essay, imperfect indeed, but built upon experiment associated with theory. The soul he pronounced to be exclusively the active principle of life; the primitive form of every body capable of life, *i.e.* organized. . . . His remarks on the characteristics of our means of knowledge, that is, the senses,* are deserving of particular attention; as well as his observations on the Common Sense; and on Consciousness† (the existence of which he was the first distinctly to recognise); on Imagination, Memory, and Recollection. Perception is the faculty which conveys to us the forms of objects. Thought is the perception of forms or ideas by means of ideas;‡ which presupposes the exercise of Sensation and Imagination. Hence a passive and an active Intelligence. The last is imperishable, (Immortality independent of Conscience§ or Memory). The thinking faculty is an energy distinct from the body, derived from without, resembling the elementary matter¶ of the stars. . . . Enjoyment is the result of the complete development of an energy, which at the same time per-

* “On the characteristics of our means of knowledge, that is, the senses, are,” &c. The original is—*ueber die Aeusserungen der Erkenntnissthaetigkeit d. i. ueber die Sinne, den Gemeinsinn*, &c. See *Literal Translation*.

† Neither by Aristotle nor by any other Greek philosopher, was Consciousness falsely analysed into a separate faculty, and the pure Greek language at least, contains no equivalent; a want which, considering the confusion and error which the word (however convenient) has occasioned among modern philosophers, we regard as anything but a defect. That we cannot *know* without *knowing that we know*, and that these are not two functions of distinct faculties, but one indivisible energy of the same power, this is well stated by Aristotle in explaining the function of the Common Sense; and to this Tennemann correctly refers. It is the error of his translator to make Aristotle treat explicitly of consciousness by name.

‡ No meaning, or a wrong meaning. The term *Idea* also, in the common modern signification, should have been carefully avoided, under the head of Aristotle.

§ *Conscience* is not used in English for *Consciousness*. Was Mr Johnson copying from the French?

¶ The word “matter” is here wrong.

fects that energy.* The most noble of all enjoyments is the result of Reason."

Literal Translation, § 145.—"Psychology is indebted to Aristotle for its first, though still imperfect, scientific treatment upon the principles of experience, although with these he has likewise combined sundry speculative views. The soul is the efficient principle of life (life taken in its most extensive signification)—the primitive form of every physical body susceptible of animation, *i. e.* of one organically constituted. . . . His remarks are especially interesting on the manifestation of our cognitive energies, *i. e.* on the Senses,—on the Common Sense, the first approach to a clear indication of Consciousness, (*die erste deutlichere Andeutung des Bewusstseyns*)—on Imagination, Reminiscence, and Memory. The Perceptive and Imaginative act (*Anschauen*) is an apprehension of the forms of objects; and Thought, again, an apprehension of the forms of those forms which Sense and Imagination presuppose. Hence a *passive* and an *active Intellect* or *Understanding*. To the latter belongs indestructibility (immortality without consciousness and recollection.) Thought is, indeed, a faculty distinct from the corporeal powers, infused into man from without, and analogous to the element of the stars. . . . Pleasure is the result of the perfect exertion of a power;—an exertion by which again the power itself is perfected. The noblest pleasures originate in Reason. Practical Reason, Will, is, according to Aristotle, and on empirical principles, determined by notions [of the Understanding], without a higher ideal principle [of Reason properly so called]."

We conclude our extracts by a quotation from the chapter on *Kant*.

Johnson's Version, § 373.—"His (Kant's) attention being awakened by the Scepticism of Hume, he was led to remark the very different degree of certainty belonging to the Deductions of Moral Philosophy,† and the conclusions of Mathematics; and to speculate upon the cause of this difference. Metaphysics, of course, claimed his regard; but he was led to believe, that as yet the very threshold of the science had not been passed. An examination of the different philosophical systems, and particularly of the jejune Dogmatism of Wolf, led him to question whether, antecedently to any attempt at Dogmatic philosophy, it might not be necessary to investigate the *possibility* of

* "Development of an *energy*" and "perfecting an *energy*," in relation to Aristotle's doctrine of the Pleasurable, is incorrect. The word in the original is, as it ought to be, *kraft*, power, or faculty. The term "complete" also does not render the original so well as "perfect." "The perfect exertion of a power" is here intended to denote, both subjectively the full and free play of the faculty in opposition to its languid exercise or its too intense excitement, and objectively, the presence of all conditions, with the absence of all impediments, to its highest spontaneous energy. Aristotle's doctrine of Pleasure, though never yet duly appreciated, is one of the most important generalizations in his whole philosophy.—The end of the section is otherwise much mutilated.

† "Moral Philosophy;" *Philosophie*. Thrice in this §.

philosophical knowledge, and he concluded that to this end an inquiry into the different sources of information,* and a critical examination of their origin and employment, were necessary; in which respect he proposed to complete the task undertaken by Locke. He laid down, in the first place, that Moral Philosophy and Mathematics are, in their origin, *intellectual sciences*.† Intellectual knowledge is distinguished from experimental by its qualities of *necessity* and *universality*. On the possibility of intellectual knowledge depends that of the philosophical sciences.‡ These are either synthetic or analytic; the latter of which methods is dependent on the first.¶ What then is the principle of synthetical *a priori* knowledge in contradistinction to experimental; which is founded on observation? The existence of a *priori* knowledge is deducible from the mathematics, as well as from the testimony of common sense;¶ and it is with such knowledge that metaphysics are chiefly conversant. A science, therefore, which may investigate with strictness the possibility of such knowledge, and the principles of its employment and application, is necessary for the direction of the human mind, and of the highest practical utility. Kant pursued this course of inquiry, tracing a broad line of distinction between the provinces of Moral Philosophy and the Mathematics, and investigating more completely than had yet been done, the

* "Information;" *Erkenntnisse*. The version is incorrect; even *Knowledge* does not adequately express the original, both because it is not also plural, and because it is of a less emphatically subjective signification. *Cognitions* would be the best translation, could we venture also on the verb *cognize* as a version of *Erkennen*.

† "Intellectual sciences;" *rationale oder Vernunft-Wissenschaften*. *Intellectus* or *Intellect* is, in the language of German philosophers, synonymous with *Verstand*, Understanding. The translator therefore here renders, as he usually does, one term of the antithesis by the other. The same capital error is repeated in the two following sentences.

‡ "Philosophical sciences;" — *philosophische Erkenntnisse*, philosophic knowledges or cognitions. This and the following errors would have been avoided by an acquaintance with the first elements of the critical philosophy.

¶ "The latter of which methods is dependent on the first." These few words contain two great mistakes. In the first place, there is no reference in the original to any synthetic and analytic *methods*, but to Kant's thrice celebrated distinction of synthetic and analytic *cognitions* or *judgments*, a distinction from which the critical philosophy departs. In the second, there is nothing to excuse the error that analytic cognitions are founded on synthetic. Analytic cognitions are said by Tennemann to rest on the primary law of thought, *i. e.* on the principle of contradiction. (See *Critik d. r. V.* p. 189, etc.)—The present is an example of the absurdity of translating this work without an explanatory amplification. The distinction of analytic and synthetic judgments is to the common reader wholly unintelligible from the context.

¶ "Common sense." Kant was not the philosopher to appeal to Common Sense. *Die gemeine Erkenntnisse* is common knowledge, in opposition to mathematical. (See *Crit. d. r. V.* Ehl. § 5.)

faculty of knowledge.* He remarked that synthetical *a priori* knowledge imparts a formal character to knowledge in general, and can only be grounded in laws affecting the Individual, and in the consciousness which he has of the harmony and union of his faculties.† He then proceeds to analyse the particulars of our knowledge, and discriminates between its elementary parts so often confounded in practice, with a view to ascertain the true nature of each species: the characteristics of necessity and universality which belong to a *priori* knowledge being his leading principles."‡

Literal Translation, § 381.—"Awakened by the scepticism of Hume, Kant directed his attention on the striking difference in the result of meditation in Mathematics and in Philosophy, and upon the causes of this difference. Metaphysic justly attracted his consideration, but he was convinced that its threshold had yet been hardly touched. Reflection, and a scrutiny of the various philosophical systems, especially of the shallow dogmatism of the Wolfian school, suggested to him the thought, that, *previous* to all dogmatical procedure in philosophy, it was necessary, *first to investigate the possibility of a philosophical knowledge*; and that to this end, an inquiry into the different sources of our knowledge,—into its origin,—and its employment, (in other words, Criticism,) was necessary. Thus did he propose to accomplish the work which had been commenced by Locke. Philosophy and mathematics, he presupposed to be, in respect of their origin, *rational sciences*, or sciences of *reason*. *Rational knowledge* is distinguished from *empirical* by its character of *necessity and universality*. With its possibility stands or falls the possibility of philosophical knowledge, which is of two kinds—*synthetic* and *analytic*. The latter rests on the fundamental law of thought [the Principle of Contradiction]; but *what is the principle of synthetic knowledge a priori*, as contrasted with empirical, of which perception is the source? That such knowledge exists, is guaranteed by the truth of mathematical, and even of common knowledge; and the effort of reason in metaphysic is mainly directed to its realization. There is therefore a science of the highest necessity and importance, which investigates, on principles, the possibility, the foundation, and the employment of such knowledge. Kant opened to himself the way to this inquiry, by taking a strict line of demarkation between Philosophy and Mathematics, and by a more profound research into the cognitive faculties than had hitherto been brought to bear; whilst his sagacity enabled him to divine, that synthetic knowledge *a priori* coincides with the *form* of our knowledge, and can only be grounded in the laws of the several faculties which co-operate in the cognitive act. Then, in order fully to discover these forms of knowledge, according to the guiding principles of universality and necessity, he undertook a dissection of knowledge, and distinguished [in reflection] what is really only presented combined, for the behoof of scientific knowledge."

* This sentence is inaccurately rendered, and not duly connected with the next.

† This sentence is incomprehensible to all; but its absurdity can be duly appreciated only by those who know something of the Kantian philosophy.

‡ The same observation is true of this sentence and of the following section, which we leave without note or comment.

Johnson's Version, § 375. . . . "The laws of ethics are superior to the empirical and determinable free-will which we enjoy in matters of practice, and assume an imperative character, occupying the chief place in practical philosophy. This categorical principle becomes an absolute law of universal obligation, giving to our conduct an ultimate end and spring of action; which is not to be considered as a passion or affection, but as a moral sense of respect for law."

Literal Translation, § 383. . . . "The Moral Law, as opposed to an empirically determined volition, appears under the character of a *Categorical Imperative*, (absolute Ought [unconditional duty],) and takes its place at the very summit of practical philosophy. This imperative, as the universal rule of every rational will, prescribes with rigorous necessity an *universal conformity to the law [of duty]*; and thereby establishes the supreme absolute end and motive of conduct, which is not a pathological feeling, [blind and mechanical,] but a reverence for the law [of duty, rational and free]."

That Mr Johnson makes no scruple of violating the good faith of a translator, is a serious accusation—but one unfortunately true. This, indeed, is principally shown, in the history of those philosophers whose speculations are unfavourable to revealed religion.—Speaking of *Hume*, Tennemann says:—"On the empirical principles of Locke, he investigated with a profoundly penetrating genius the nature of man as a thinking, and as an active being. This led him through a train of consequent reasoning to the sceptical result that, &c. . . . And in these investigations of Hume, philosophical scepticism appeared with a terrific force, profundity (*Grundlichkeit*), and logical consequence, such as had never previously been witnessed, and at the same time in a form of greater precision, perspicuity and elegance." Thus rendered by Mr Johnson:—"Taking the experimental principles of Locke as the foundation of his system, he deduced from them many acute but specious conclusions respecting the nature and condition of man, as a reasonable agent. He was led on by arguments, the fallacy of which is lost in their ingenuity, to the inference that, &c. . . . The investigations of Hume were recommended, not only by a great appearance of logical argumentation, but by an elegance and propriety of diction, and by all those graces of style which he possessed in so eminent a degree, and which made his scepticism more dangerous than it deserved to be."—The same tampering with the text we noticed in the articles on *Hobbes* and *Lord Herbert of Cherbury*.—We hardly attribute to intention what Mr Johnson says of *Krug*, that "he appears to add little to Kant, except a superior degree of obscurity." *Krug* is known to those versed in German philosophy, not only as a very acute, but as a

very lucid writer. In his autobiography, we recollect, he enumerates *perspicuity* as the first of his three great errors as an author; reverence for common sense, and contempt of cant, being the other two. Tennemann attributes to him "uncommon clearness."

As a specimen of our translator's contemptuous vituperation of some illustrious thinkers, we shall quote his notes on *Fichte* and *Schelling*, of whose systems, it is almost needless to say, his translation proves him to have understood nothing.

After reversing in the text what Tennemann asserts of Fichte's unmerited persecution, we have the following note:—"It is painful to be the instrument of putting on record so much of nonsense and so much of blasphemy as is contained in the pretended philosophy of Fichte; the statement, however, will not be without its good, if the reader be led to reflect on the monstrous absurdities which men will believe at the suggestion of their own fancies, who have rejected the plain evidences of Christianity." [Fichte was, for his country and generation, an almost singularly pious Christian. He was even attacked by the theologians—for his orthodoxy.]—On Schelling's merits we have the following dignified decision:—"The grave remarks of the author on this absurd theory, might perhaps have been worthily replaced by the pithy criticism of Mr Burchell, apud the Vicar of Wakefield, as applied to other absurdities, videlicet—*Fudge—Fudge—Fudge.*"

But enough!—We now take our leave of Mr Johnson, recommending to him a meditation on the excellent motto he has prefixed to his translation:—" *Difficile est in philosophia pauca esse ei nota, cui non sint aut pleraque aut omnia.*"

IV.—LOGIC.

IN REFERENCE TO THE RECENT ENGLISH TREATISES
ON THAT SCIENCE.*

(APRIL, 1833.)

1. *Artis Logicæ Rudimenta, with Illustrative Observations on each Section.* Fourth edition, with Additions. 12mo. Oxford: 1828.
2. *Elements of Logic.* By RICHARD WHATELY, D.D., Principal of St Alban's Hall, and late Fellow of Oriel College, Oxford. Third edition. 8vo. London: 1829.
3. *Introduction to Logic, from Dr Whately's Elements of Logic.* By the Rev. SAMUEL HINDS, M.A., of Queen's College, and Vice-Principal of St Alban's Hall, Oxford. 12mo. Oxford: 1827.
4. *Outline of a New System of Logic, with a Critical Examination of Dr Whately's "Elements of Logic,"* by GEORGE BENTHAM, Esq. 8vo. London: 1827.
5. *An Examination of some Passages in Dr Whately's Elements of Logic.* By GEORGE CORNEWALL LEWIS, Esq., Student of Christ Church. 8vo. Oxford: 1829.
6. *A Treatise on Logic on the Basis of Aldrich, with Illustrative Notes by the Rev. JOHN HUYSHE, M.A.,* Brazen-nose College, Oxford. 12mo. Second edition. Oxford: 1833.
7. *Questions on Aldrich's Logic, with References to the most Popular Treatises.* 12mo. Oxford: 1829.
8. *Key to Questions on Aldrich's Logic.* 12mo. Oxford: 1829.
9. *Introduction to Logic.* 12mo. Oxford: 1830.
10. *Aristotle's Philosophy.* (An Article in Vol. iii. of the Seventh

* [In French by M. Peissé; in Italian by S. Lo Gatto; in Crosse's Selections.]

Edition of the *Encyclopædia Britannica*, now publishing.)
By the REV. RENN DICKSON HAMPDEN, M.A., late Fellow of
Oriental College, Oxford. 4to. Edinburgh: 1832.

NOTHING, we think, affords a more decisive proof of the oblique and partial spirit in which philosophy has been cultivated in Britain, for the last century and a half, than the combined perversion and neglect, which Logic—the science of the formal laws of thought—has experienced during that period. Since the time, and principally, we suspect, through the influence of Locke, (who, as Leibnitz observed, “*sprevit logicam non intellexit*,”) no country has been so poor in this department of philosophy, whether we estimate our dialectical literature by its mass or by its quality. Loath to surrender the subject altogether, yet unable, from their own misconception of its nature, to vindicate to logic, on the proper ground, its paramount importance, as a science *a priori*, distinct, and independent: the few logical authors who appeared, endeavoured, on the one hand, by throwing out what belonged to itself, of an unpopular and repulsive character, to obviate disgust; and, on the other, by interpolating what pertained to other branches of philosophy,—here a chapter of psychology, there a chapter of metaphysic, &c.—to conciliate to the declining study a broader interest than its own. The attempt was too irrational to succeed; and served only to justify the disregard it was meant to remedy. This was to convert the interest of science with the interest of amusement:—this was not to amplify logic, but to deform philosophy; by breaking down their boundaries, and running its several departments into each other.

In the Universities, where Dialectic (to use that term in its universality) once reigned “The Queen of Arts,” the failure of the study is more conspicuously remarkable.

In those of *Scotland*, the Chairs of Logic have for generations taught any thing rather than the science which they nominally profess;—a science, by the way, in which the Scots have not latterly maintained the reputation once established by them in all,*

* “*Les Escossois sont bons Philosophes*,”—pronounced the Dictator of Letters. (Scaligerana Secunda).—Servetus had previously testified to their character for logical subtilty:—“*Dialecticis argutis sibi blandiuntur*,” (Præf. in Ptolem. Geogr. 1533.) [My learned friend, Mr James Broun of the Temple, shews me that the unhappy heretic had here only copied the words of Erasmus,—a far higher authority. (Enc. Morie.)]—For a considerable

and still retained in other departments of philosophy. To the philosophers, indeed, of our country, we must confess, that, in

period, indeed, there was hardly to be found a continental University of any note, without the appendage of a Scottish Professor of Philosophy.—[In the Key to Barclay's Satyricon, it is said of Cardinal du Perron, under Henry IV. :—"Ejus solitudine, in Gallia plures Scoti celebri nomine bonas artes professi sunt, quam in ipsa Scotia foverentur et aluntur a Rege."—Sir Thomas Urquhart is less enthusiastic than usual, in his diction of the following passage :—"There was a professor of the Scottish nation, within these sixteen years, in Somure, who spoke Greek with as great ease as ever Cicero did Latine, and could have expressed himself in it as well and as promptly as in any other language, [Urquhart refers to Johannes Camero, the celebrated theologian—and as he himself calls him, the "bibliotheca movens"]; yet the most of the Scottish nation never having ascribed themselves so much to the propriety of words as to the knowledge of things, [?] where there was one preceptor of languages amongst them, there were above forty professors of philosophy. Nay, to so high a pitch did the glory of the Scottish nation attain over all the parts of France, and for so long a time together continued in that attained height, by virtue of an ascendant, the French considered the Scots to have, above all nations, in matter of their subtlety in philosophical disquisitions, that there have not been, till of late, for these several ages together, any lord, gentleman, or other in all that country, who being desirous to have his son instructed in the principles of philosophy, would intrust him to the discipline of any other than a Scottish master; of whom they were no less proud than Philip was of Aristotle, or Tullius of Cratippus. And if it occurred, as very often it did, that a pretender to a place in any French university, having in his tender years been subalternary to some other kind of schooling, should enter into competition with another aiming at the same charge and dignity, whose learning flowed from a Caledonian source, commonly the first was rejected, and the other preferred; education of youth in all grounds of literature under teachers of the Scottish nation being then held by all the inhabitants of France to have been attended, *cæteris paribus*, with greater proficiency than any other manner of breeding subordinate to the documents of those of another country. Nor are the French the only men who have harboured this good opinion of the Scots in behalf of their inward abilities, but many times the Spaniards, Italians, Flemings, Dutch, Hungarians, Sweds, and Polesians, have testified their being of the same mind, by the promotions whereunto, for their learning, they, in all those nations at several times, have attained." (Jewel, 1652, Works, p. 258).—As in literature and philosophy, so in war. Scots officers, in great numbers, and of distinguished merit, figured in the opposite armies of Gustavus and Ferdinand,—especially of the former; yet the commandant of the Fort of Egra, and *all* the executioners or murderers of Wallenstein, were Scots—with a sprinkling of Irish—gentlemen.—The Scots, too, were long the merchants of Poland, and the "travelling merchants," Anglice, pedlars, of Europe. On this, see "*Hercules tuam fidem*," (1608, p. 125)—one of the squibs against Scioptius in the Scaligeran controversy.]

great part is to be attributed the prevalence of the erroneous notions on this subject promulgated by Locke. No system of logic deserving of notice, in fact, ever appeared in Scotland; and for Scottish logical writers of any merit, we must travel back for more than two centuries, to three contemporary authors, whose abilities, like those, indeed, of almost all the more illustrious scholars of their nation, were developed under foreign influence,—to Robert Balfour,* Mark Duncan,† and William

* ["We find in *La Logique, ou art de discourir et raisonner* of Scipio Dupleix, Royal Counsellor, &c., a handsome eulogy of Balfour. The author declares that he draws his doctrine from Aristotle, and his most celebrated interpreters. 'Sur tous lesquels je prise *M. Robert Balfour*, gentil-homme Escossois, tant pour sa rare et profonde doctrine aux sciences et aux langues, que pour l'intégrité de ses mœurs. Aussi luy doys-je le pen de sçavoir que j'ay acquis, ayant eu l'honneur de jouir familièrement de sa douce et vraiment philosophique conversation' (Preface, f. 5.) Farther on, and in the body of the work, (f. 25.) he calls '*M. Robert Balfour*, le premier Philosophe de nostre memoire,' &c.—This *Logie* of Dupleix is, with *L'Organe* of Philip Cauaye, and the *Dialectique* of Ramus, one of the oldest treatises on this science written in French. It is a very competent analysis of the *Organon*. The third edition is of 1607; the first probably published at the close of the sixteenth century."—M. PEISSE.—My copy of Scipio Dupleix's *Logie* is of the second edition, "enlarged by the author," and in 1604. From the "Privilege," at the end, it appears that the first edition was of 1600. As M. Peisse remarks, it is an excellent work.—Balfour's learned countryman and contemporary, Thomas Dempster, in his *Historia Ecclesiastica* (§ 209) speaks of him, as "sui seculi phoenix, Græce et Latine doctissimus, philosophus et mathematicus praeclarus conferendus," &c. &c.; and writing in Italy, he notices that Balfour was then (1627) living, having been for thirty years Principal of the College of Bourdeaux. Balfour's *Cleomedes*, edition and commentary are eulogised to the highest by Barthius and Bake; whilst his Council of Nice, and the notes, have gained him a distinguished reputation among theologians. His series of Commentaries on the *Logie*, *Physics*, and *Ethics* of Aristotle, were published at Bourdeaux, in 4°, and are all of the highest value. The second edition of that on the *Organon* appeared in 1620, and extends to 1055 pages. It is, however, a comparatively rare book, which may excuse subsequent editors and logicians for their ignorance of its existence.]

† [It is impossible to speak too highly of the five books of the *Institutio Logica* by Mark Duncan, "Doctor of Philosophy and Medicine." The work, which extends only to about 280 octavo pages, was at least five times printed; the first edition appearing, in 1612, at Sanmur, for the use of that University, was republished at Paris, in the following year. It forms the basis of Burgersdyk's *Institutiones Logicæ* (Leyden, 1626), who had been Duncan's colleague in Sanmur; and that celebrated logician declares, that from it, (speaking only of the first or unimproved edition), he had received

Chalmers,* Professors in the Universities of Bourdeaux, Saumur, and Anjou. In *Cambridge* the fortune of the study is indicated by

more assistance than from all other systems of the science put together. In fact, Duncan's Institutions are, in many respects, better even than his own; and were there now any intelligent enthusiasm for such studies, that rare and little book would incontinently be republished.—I have not seen the author's *Synopsis Ethicæ*.—Duncan, as physician, figures in the celebrated process of Urban Grandier and the Nuns of Landun (1634.) Medical practice seems indeed to have withdrawn him from philosophical speculation. James VI. nominated Duncan Physician Royal, and he would have transferred himself to London, but his wife and her family were averse from migrating "to a ferocious nation and an inclement sky."—His elder brother, William, as Dempster assures us, "bonis artibus supra hoc seculum, et maxime Græcis literis ad miraculum imbutus," was distinguished also as Professor of Philosophy and Physic in the schools of Tholouse and Montauban.—Mark's son, Mark also, but better known under the name of M. des Cerisantes, was a kind of Admirable Crichton; his life is more romantic than a romance. He obtained high celebrity as a Latin poet; for, though his pieces be few, they comprise what are not unjustly landed, as the best imitations extant of Catullus. By him there is an elegiac address to his father, on the republication of the *Logical Institution*, in 1627. It is found also, in the third, but not in the fourth, edition of that work; and it establishes, once and again, that the logician, then alive, was a *native of Scotland*, and not merely born of a Scottish grandfather in England:—

"*Ecce Caledoniis Duncanus natus in oris;*"

and addressing the book,

"*Scotia cum primis pernice adeunda volatu,
Namque patrem tellus edidit illa tuum.*"

Joseph Scaliger also testifies to the nativity of his friend Duncan, in Scotland, and, apparently in the west of Scotland. Speaking of the Gaelic, he says:—"qua in Scotia occidentalibus (unde *Duncanus* et *Buchananns* sunt oriundi) . . . utuntur." (Prima Scaligerana, voce *Britones*.)—Scaliger, I may notice, had resided for some time in Scotland.—Dr Kippis (Biogr. Brit. V. 494.) states, on very respectable authority, that William and Mark were born in *London*, their father, Alexander, in *Beverley*. He is, however, wrong.]

* [The *Disputationes Philosophicæ Gulielmi Camerarii Scoti, Congregationis Oratorii Domini Jesu Presbyteri* (in folio, Paris, 1630, pp. 620), is a work of much learning, and of considerable acuteness. The first part is logical; but among other treatises of this author, I have not seen his *Introductio ad Logicam*, (in octavo, Anjou, and of the same year.)—It is a curious illustration of the "*Scoti extra Scotiam agentes*:" that there were *five* Camerarii, five Chalmerses; all flourishing in 1630; all Scotsmen by birth; all living on the Continent; and there, all Latin authors; viz., two Williams, two Davids, and one George. The preceding age shews several others.]

the fact, that while its statutory teaching has been actually defunct for ages, the "Elements of Logic" of William Duncan of Aberdeen, have long collegially dispensed a muddy scantling of metaphysic psychology, and dialectic, in the University where Downam taught; * whilst Murray's *Compendium Logicæ*, the Trinity College text-book, may show that matters are, if possible, at a lower pass in *Dublin*.

In *Oxford*, the fate of the science has been somewhat different, but, till lately, scarcely more favourable. And here it is necessary to be more particular, as this is the only British seminary where the study of logic proper can be said to have survived; and as, with one exception, the works under review all emanate from that University,—represent its character,—and are determined and modified by its circumstances. Indeed, with one or two insignificant exclusions, these works comprise the *whole* recent logical literature of the kingdom.

During the scholastic ages, Oxford was held inferior to no University throughout Europe; and it was celebrated, more especially, for its philosophers and dialecticians. But it was neither the recollection of old academical renown, nor any enlightened persuasion of its importance, that preserved to logic a place among the subjects of academical tuition, when the kindred branches of philosophy, with other statutory studies, were dropt from the course of instruction actually given. These were abandoned from no conviction of their inutility, nor even in favour of others of superior value: they were abandoned when the system under which they could be taught, was, for a private interest, illegally superseded by another under which they could not. When the College Fellows supplanted the University Professors, the course of statutory instruction necessarily fell with the statutory instruments by which it had been carried through. The same extensive, the same intensive, education which had once been possible when the work was distributed among a body of Professors, each

* [I understand that William Duncan's *Elements*, and every other logical spectre, are now in Cambridge, even collegially, laid, and that mathematics are there at length left to supply the discipline which logic was of old supposed exclusively to afford. If, however, the "Philosophical Society of Cambridge" may represent the University, its *Transactions* are enough to show the wisdom of the old and statutory in contrast to the new and illegal, and that Coleridge (himself a Cantabrigian, and more than nominally a philosopher,) was right in declaring "*Mathematics to be no substitute for Logic.*"—See Appendix II. (B).]

chosen for his ability, and each concentrating his attention on a single study, could no longer be attempted, when the collegial corporations, a fortuitous assemblage of individuals, in so far as literary qualification is concerned, had usurped the exclusive privilege of instruction; and when each of these individuals was authorised to become sole teacher of the whole academical cyclopædia. But while the one unqualified Fellow-tutor could not perform the work of a large body of qualified Professors; it is evident that, as he could not rise and expand himself to the former system, that the present, existing only for his behoof, must be contracted and brought down to him. This was accordingly done. The mode of teaching, and the subjects taught, were reduced to the required level and extent. The capacity of lecturing, that is, of delivering an original course of instruction, was not now to be expected in the tutor. The pupil, therefore, read to his tutor a lesson out of book; on this lesson the tutor might, at his discretion, interpose an observation, or preserve silence; and he was thus effectually guaranteed from all demands, beyond his ability or inclination to meet. This reversed process was still denominated a *lecture*. In like manner, all subjects which required in the tutor more than the Fellows' average of learning or acuteness, were eschewed. Many of the most important branches of education in the legal system were thus discarded; and those which it was found necessary or convenient to retain in the intrusive, were studied in easier and more superficial treatises. This, in particular, was the case with logic.

By statute, the Professor of Dialectic was bound to read and expound the *Organon* of Aristotle twice a-week; and, by statute, regular attendance on his lectures was required from all undergraduates for their last three years. Until the statutory system was superseded, an energetic and improving exercise of mind from the intelligent study of the most remarkable monument of philosophical genius, imposed on all, was more especially secured in those who would engage in the subsidiary business of tuition. This, and the other conditions of that system, thus determined a far higher standard of qualification in the Tutor, when the tutor was still only a subordinate instructor, than remained when he had become the exclusive organ of academical education. When, at last, the voice of the Professors was silenced in the University, and in the Colleges the Fellows had been able to exclude all other graduates from the now principal office of Tutor, the study of

logic declined with the ability of those by whom the science was taught. The original treatises of Aristotle were now found to transcend the College complement of erudition and intellect. They were accordingly abandoned; and with these the various logical works previously in academical use, which supposed any reach of thought, or an original acquaintance with the *Organon*. The Compendium of *Sanderson* stood its ground for a season, when the more elaborate treatises (erst in academical use) of *Brerewood*, *Craekanthorpe*, and *Smiglecius*, were forgotten. But this little treatise, the excellent work of an accomplished logician, was too closely relative to the books of the *Organon*, and demanded too frequently an inconvenient explanation, to retain its place, so soon as another text-book could be introduced, more accommodated to the fallen and falling standard of tutorial competency. Such a text-book was soon found in the Compendium of *Aldrich*. The dignity of its author, as Dean of Christ Church, and his reputation as an ingenious, even a learned, writer in other branches of knowledge, ensured it a favourable recommendation: it was yet shorter than *Sanderson's*; written in a less scholastic Latin; adopted an order wholly independent of the *Organon*; and made no awkward demands upon the Tutor, as comprising only what was either plain in itself, or could without difficulty be expounded. The book—which, in justice to the Dean, we ought to mention was not originally written for the public—is undoubtedly a work of no inconsiderable talent; but the talent is, perhaps, principally shown, in the author having performed so cleverly a task for which he was so indifferently prepared. Absolutely considered, it has little or no value. It is but a slight eclectic epitome of one or two logical treatises in common use (that it is exclusively abridged from *Wallis* is incorrect); and when the compiler wanders from, or mistakes, his authorities, he displays a want of information to be expected, perhaps, in our generation, but altogether marvellous in his. It is clear, that he knew nothing of the ancient, and very little of the modern, logicians. The treatise likewise omits a large proportion of the most important matters; and those it does not exclude are treated with a truly unedifying brevity. As a slender introduction to the after-study of logic (were there not a hundred better) it is not to be despised; as a full course of instruction,—as an independent system of the science, it is utterly contemptible. Yet, strange to say, the Compend of *Aldrich*, having gradually

supplanted the Compend of Sanderson, has furnished, for above a century, the little all of logic doled out in these latter days by the University of Bradwardin and Scotus.*

Even the meliorations of the academical system have not proved beneficial to this study: perhaps, indeed, the reverse. Since the institution of honours,—since the re-introduction, however limited, of a real examination for the first degree in arts, a powerful stimulus has been applied to other studies,—to that of Logic none. Did a candidate make himself master of the *Organon*? he would find as little favour from the dispensers of academical distinction, as he had previously obtained assistance from his tutor. For the public Examiners could not be expected, either to put questions on what they did not understand, or to encourage the repetition of such overt manifestations of their own ignorance. The minimum of Aldrich, therefore, remained the maximum of the “schools;” and was “got up,” not to obtain honour, but to avoid disgrace.—Yet even this minimum was to be made less; there was “a lower deep beneath the lowest deep.” His Compendium, a meagre duodecimo of a hundred and eighty pages, to be read in a day, and easily mastered in a week, was found too ponderous a volume for Pupil, and Tutor, and Examiner. It was accordingly subjected to a process of extenuation, out of which it emerged, reduced to little more than a third of its original gracility—a skeleton without marrow or substance. “Those who go deep in dialectic,” says Aristo Chius, “may be resembled to crab-eaters; for a mouthful of meat, they spend their time over a heap of shells.” But your superficial student of logic, he loses his time without even a savour of this mouthful; and Oxford, in her senility, has proved no *Alma Mater*, in thus so unpitiously cramming her alumni with the shells alone. As Dr Whately observes:—“A very small proportion even of distinguished stu-

* Some thirty years ago, indeed, there was printed, “in usum academicae juventutis,” certain *Excerpta ex Aristotelis Organon*. The execution of that work shows how inadequate its author was to the task he had undertaken. Nothing could be more conducive to the rational study of logic than a systematic condensation of the more essential parts of the different treatises of the *Organon*, with original illustrations, and selections from the best commentators, ancient and modern. As it is, this petty publication has exerted no influence on the logical studies of the University; we should like to know how many tutors have expounded it in their lectures, how many candidates have been examined on it in the schools. On the logical authors, at least, of the University, it has exerted none.

dents ever become proficient in logic; and by far the greater proportion pass through the University without knowing anything at all of the subject. I do not mean that they have not learned by rote a string of technical terms, but that they understand absolutely nothing whatever of the principles of the science." The miracle would be, if they ever did. Logic thus degraded to an irksome, but wholly unprofitable, penance, the absurdity of its longer enforcement was felt by some intelligent leaders of the University. "It was proposed," says Dr Whately, "to leave the study of logic altogether to the option of the candidates;" a proposal hailed with joy by the under-graduates, who had long prayed fervently with St Ambrose,—"*A Dialectica Aristotelis libera nos, Domine.*"*

In these circumstances, when even the Heads could not much longer have continued obstinate, and Logic seemed in Oxford on the eve of following the sister sciences of Philosophy to an academic grave, a new life was suddenly communicated to the expiring study, and hope, at least, allowed for its ultimate convalescence under a reformed system.

This was mainly effected by the publication of the *Elements* of Dr Whately, then Principal of St Alban's Hall, and recently (we rejoice) elevated to the Archiepiscopal See of Dublin. (No. 2, of the works at the head of this Article.) Somewhat previously, the *Rudimenta* (abbreviated Compendium) of Aldrich had been illustrated with English notes by an anonymous author, whom we find quoted in some of the subsequent treatises under the name of Hill. (No. 1.) The success and ability of the *Elements* prompted imitation and determined controversy. Mr Bentham (nephew of Mr Jeremy Bentham) published his *Outline* and *Examination*, in which Dr Whately is alternately the object of censure and encomium. (No. 4.) The pamphlet of Mr Lewis (on two points only) is likewise controversial. (No. 5.) The Principal, as becoming, was abridged and lauded by his Vice (No. 3); and the treatises of Mr Huyshe and others (Nos. 6, 7, 8, 9) are all more or less relative to Dr Whately's, and all so many manifestations of the awakened spirit of logical pursuit. The last decade, indeed, has done more in Oxford for the cause of this science than the whole hundred and thirty years pre-

* [This addition of St Ambrose to the Litany, I took as recorded by Cardinal Cusa.]

ceding;* for since the time of Wallis and Aldrich, until the works under review, we recollect nothing on the subject which the University could claim, except one or two ephemeral tracts;—the shallow “Reflections” of Edward Bentham, about the middle of the last century; and after the commencement of the present, a couple of clever pamphlets in vindication of logic, and in extinction of the logic of Kett—which last also was a mooncalf of Alma Mater.

It remains now to inquire:—*At what value* are we to rate

* [Since that time, with a rise of the academical spirit, the study of logic has been still more zealously pursued in Oxford, and several resident members of the University have published treatises on the science, of no ordinary merit. I may chronologically notice those of Mr Wooley, Mr Thomson, Mr Chretien, Mr Mansel, and Mr Karslake.—To two of these gentlemen I am, indeed, under personal obligations.—*Mr Thomson*, in the second edition of his *Laws of Thought*, among other flattering testimonies of his favourable opinion, has done me the honour of publishing the specimen which I had communicated to him, of a scheme of Syllogistic Notation; and I regret to find, that this circumstance has been the occasion of some injustice, both to him and to me. To him:—inasmuch, as he has been unfairly regarded as a mere expositor of my system; to me:—inasmuch, as his objections to that system have been unfairly regarded as decisive. In point of fact, though we coincide, touching the thoroughgoing quantification of the predicate in affirmative propositions, we are diametrically opposed, touching the same quantification in negatives. But, while I am happy, in the one case, to receive even a partial confirmation of the doctrine, from Mr Thomson’s able and independent speculation; I should be sorry, on the other, to subject, what I deem, the truth to the uncanvassed opinion of any human intellect.—To *Mr Mansel*, besides sundry gratifying expressions of approval, in his acute and learned *Notes on the Rudiments of Aldrich*, I am indebted for valuable aid in the determination of a curious point in the history of logic. Instead of *Petrus Hispanus* being a plagiarist, and his *Summulae* a translation from the Greek, as supposed by Ehinger, Keckermann, Placcius, J. A. Fabricius, Brucker,—by all, in short, who, for the last two centuries and a half, have treated of the matter; it is now certain, that the “*Synopsis Organica*,” published under the name of Michael Psellus (the younger) is itself a mere garbled version of the great logical text-book of the west, and, without any authority, capriciously fathered, by Ehinger, as an original work, on the illustrious Byzantine. I am now, in fact, able to prove:—that in the Augsburg Library, the codex from which Ehinger printed, contained neither the title nor the author’s name under which his publication appeared; and that in several of the European libraries there are extant Greek manuscripts, identical with the text of that publication, and professing to be merely copies of a translation from the Latin original of Hispanus.—This detection enables us also to trace the Γράμματα, Ἐγχεψι, &c. of Blemmides and the Greeks to the *Barbara*, *Clarent*, &c. of Hispanus and the Latins.]

these new logical publications?—Before looking at their contents, and on a knowledge only of the general circumstances under which they were produced, we had formed a presumptive estimate of what they were likely to perform; and found our anticipation fully confirmed, since we recently examined what they had actually accomplished. None of the works are the productions of inferior ability; and though some of them propose only an humble end, they are all respectably executed. A few of them display talent rising far above mediocrity; and one is the effort of an intellect of great natural power. But when we look from the capacity of the author to his acquirements, our judgment is less favourable. If the writers are sometimes original, their matter is never new. They none of them possess,—not to say a superfluous erudition on their subject,—even the necessary complement of information. Not one seems to have studied the logical treatises of Aristotle; all are ignorant of the Greek Commentators on the Organon, of the Scholastic, Ramist, Cartesian, Wolfian, and Kantian dialectic. In none is there any attempt at the higher logical philosophy: we have no preliminary determination of the fundamental laws of thought; no consequent evolution, from these laws, of the system itself. On the contrary, we find principle buried in detail; inadequate views of the science; a mere agglutination of its parts; of these some wholly neglected, and others, neither the most interesting nor important, elaborated out of bounds;—and always, though in very different proportions, too much of the “shell,” too little of the “meat.” They are rarely, indeed, wise above Aldrich. His partial views of the order and comprehension of the science have determined theirs; his most egregious blunders are repeated; and sometimes when an attempt is made at a correction, either Aldrich is right, or a new error is substituted for the old. Even Dr Whately, who, in the teeth of every logician from Alexander to Kant, speaks of “the *boundless* field within the legitimate limits of the science,” “walks in the trodden ways,” and is guiltless of “removing the ancient landmark.” His work, indeed, never transcends, and generally does not rise to, the actual level of the science; nor, with all its ability, can it justly pretend to more than a relative and local importance. Its most original and valuable portion is but the insufficient correction of mistakes touching the nature of logic, long exploded, if ever harboured, among the countrymen of Leibnitz, and only lingering among the disciples of Locko.

An articulate proof of the accuracy of these conclusions, on all the works under consideration, would far exceed our limits. Nor is this requisite. It will be sufficient to review that work, in chief, to which most of the others are correlative, and which stands among them all the highest in point of originality and learning;—and the rest occasionally, in subordination to that one. Nor in criticising Dr Whately's *Elements* can we attempt to vindicate all or even the principal points of our judgment. To show the *deficiencies* in that work, either of principle or of detail, would, in the universal ignorance in this country of logical philosophy and of a high logical standard, require a preliminary exposition of what a system of this science ought to comprehend, far beyond our space, were we even to discuss these points to the exclusion of every other. We must, therefore, *omitting imperfections*, confine ourselves to an indication of some of Dr Whately's positive *errors*. This we shall attempt, "though the work," as its author assures us, "has undergone, not only the close examination of himself and several friends, but the severer scrutiny of determined opponents, without any material errors having been detected, or any considerable alteration found necessary." In doing this, nothing could be farther from our intention than any derogation from the merit of that eminent individual, whom, even when we differ most from his opinions, we respect, both as a very shrewd, and (what is a rarer phenomenon in Oxford) a very independent thinker. The interest of truth is above all personal considerations; and as Dr Whately, in vindication of his own practice, has well observed:—"Errors are the more carefully to be pointed out in proportion to the authority by which they are sanctioned." "No mercy," says Lessing, "to a distinguished author." This, however, is not our motto; and if our "scrutiny" be "severe," we are conscious that it cannot justly be attributed to "determined opposition."

We find matter of controversy even in the first page of the *Elements*, and in regard even to the first question of the doctrine:—*What is Logic?*—Dr Whately very properly opens by a statement, if not a definition, of the nature and domain of logic; and in no other part of his work have the originality and correctness of his views been more applauded, than in the determination of this fundamental problem. He says:—

"Logic, in the most extensive sense which the name can with propriety be made to bear, may be considered as the *Science*, and also as the *Art*, of

Reasoning. It investigates the principles on which argumentation is conducted, and furnishes rules to secure the mind from error in its deductions. Its most appropriate office, however, is that of instituting an analysis of the process of the mind in reasoning; and in this point of view it is, as has been stated, strictly a science; while, considered in reference to the practical rules above mentioned, it may be called the art of reasoning. This distinction, as will hereafter appear, has been overlooked, or not clearly pointed out by most writers on the subject; logic having been in general regarded as merely an art, and its claim to hold a place among the sciences having been expressly denied." (Elements, p. 1.)

Here the enquiry naturally separates into two branches;—the one concerns the *genus*, the other the *object-matter*, of logic.

In regard to the *former*:—Dr Whately's reduction of logic to the twofold category of *Art* and *Science*, has earned the praises of his Critical Examiner; but Mr Bentham, it must be acknowledged, is as often out in his encomium as in his censure. He observes:—

"Dr Whately has in particular brought to view one very important fact, overlooked by all his predecessors, though so obvious, when once exhibited, as to make us wonder that it should not have been remarked: viz. that logic is a *science* as well as an *art*. The universally prevailing error, that human knowledge is divided into a number of parts, some of which are arts without science, and others sciences without art, has been fully exposed by Mr [Jeremy] Bentham in his *Chrestomathia*. There also it has been shown, that there cannot exist a single art that has not its corresponding science, nor a single science which is not accompanied by some portion of art. The Schoolmen, on the contrary, have, with extraordinary effort, endeavoured to prove that logic is an art only, not a science; and in that particular instance, Dr Whately is, I believe, one of the first who has ventured to contradict this ill-founded assertion."—(Outline, p. 12.)

In all this there is but one statement with which we can agree. We should certainly "wonder" with Mr Bentham, had any "so obvious and important fact" been overlooked by all Dr Whately's predecessors; and knowing something of both, should assuredly be less disposed to presume a want of acuteness in the old logicians, than any ignorance of their speculations in the new. In the latter alternative, indeed, will be found a solution of the "wonder." Author and critic are equally in error.

In the first place, looking merely to the nomenclature, both are historically wrong. "Logic," says Dr Whately, "has been in general regarded merely as an *art*, and its claim to hold a place among the *sciences* has been expressly denied." The reverse is true. The great majority of logicians have regarded Logic as a

Science, and expressly denied it to be an Art. This is the oldest as well as the most general opinion.—“The Schoolmen,” says Mr Bentham, “have with *extraordinary effort* endeavoured to prove that logic is an art only.” On the contrary, the Schoolmen have not only “with extraordinary effort,” but with unexampled unanimity laboured in proving logic to be exclusively a Science; and so far from “Dr Whately being” (with Mr Jeremy Bentham) “the first to contradict this ill-founded assertion,” the paradox of these gentlemen is only the truism of the world beside. This error is the more surprising, as the genus of logic is one of those vexed questions on which, as Ausonius has it,

—“*omnis certat dialectica turba sophorum*”;

indeed, until latterly, no other perhaps stands so obtrusively forward during the whole progress of the study.—Plato and the Platonists considered dialectic as a *science*; but with them dialectic was a real not a formal discipline, and corresponded rather to the metaphysic than to the logic of the Peripatetics.—Logic is not defined by Aristotle.—His Greek followers, (and a considerable body of the most eminent dialecticians since the revival of letters,) *deny it to be either science or art*.—The Stoics in general viewed it as a *science*.—The Arabian and Latin Schoolmen did the *same*. In this opinion Thomist and Scotist, Realist and Nominalist, concurred; an opinion adopted, almost to a man, by the Jesuit, Dominican, and Franciscan Cursualists.—From the restoration of letters, however, and especially during the latter part of the sixteenth century, so many Aristotelians, with the whole body of Ramists, (to whom were afterwards to be added a majority of the Cartesians, and a large proportion of the Eclectics,) maintained that it was an *art*; that the error of Sanderson may be perhaps excused in attributing this opinion to “almost all the more recent authors” at his time. Along with these, however, (so far is Dr Whately from having “brought to view this important fact, overlooked by all his predecessors,”) there was a very considerable party who anticipated the supposed novelty of this author in defining logic by the double genus of *art and science*.*—In the schools of Wolf and Kant, logic again obtained the name of *science*.

* To make reference to these would be *de trop*; we count above a dozen logicians of this class in our own collection. But independently of the older and less familiar authors, Mr Jeremy Bentham and Dr Whately have no claim (the latter makes none) to originality in this observation. Even the

But,—to look beneath the name,—as Dr Whately and his critic are wrong in imagining that there is any novelty in the observation, they are equally mistaken in attributing to it the smallest importance. The question never concerned logic itself, but merely the meaning of the terms by which it should be defined. The old logicians, (however keenly they disputed whether logic were a science or an art,—or neither,—or both,—a science speculative, or a science practical,—or at once speculative and practical,)—never dreamt that the controversy possessed, in so far as logic was concerned, more than a verbal interest.* In regard to the essential nature of logic they were at one; and contested only, what was the comprehension of these terms in philosophical propriety, or rather what was the true interpretation of their Aristotelic definitions. Many intelligent thinkers denounced, with Vives, the whole problem as frivolous. “*Questioni locum dedit misera homonymia*,” says Mark Duncan, among a hundred others. The most strenuous advocates of the several opinions regularly admit, that unless the terms are taken in the peculiar signification for which they themselves contend, that all and each of their adversaries may be correct; while, at the same time, it was recognised on all hands, that these terms were vulgarly employed in a vague or general acceptation, under which every opinion might be considered right, or rather no opinion could be deemed wrong. The preparatory step of the discussion was, therefore, an elimination of these less precise and appropriate significations, which, as they

last respectable writer on logic in the British empire, previous to these gentlemen, Dr Richard Kirwan, whose popular and able volumes were published in 1807, defines logic as *art and science*; and this in terms so similar to those of Dr Whately, that we cannot hesitate in believing that this author had his predecessor's definition (which we shall quote) immediately in view. “Logic is both a science and an art; it is a *science*, inasmuch as, by analysing the elements, principles, and structure of arguments, it teaches us how to discover their truth or detect their fallacies, and point out the sources of such errors. It is an *art*, inasmuch as it teaches how to arrange arguments in such manner, that their truth may be most readily perceived, or their falsehood detected.”—(Vol. I. p. 1.)

* Father Buffier is unjust to the old logicians, but he places the matter on its proper footing in reference to the new.—“*Si la logique est une science. Oui et non; selon l'idée qu'il vous plait d'attacher au nom de science, &c. — Si la logique est un art. Encore un fois, oui et non; — Il pait aux logiciens de disputer si la logique est, ou n'est pas un art; et il ne leur plait pas toujours d'avouer ni d'enseigner a leurs disciples, que c'est une pure ou puerile question de nom.*” (Cours des Sciences, (Logique), p. 887.)

could at best only afford a remote genus and difference, were wholly incompetent for the purposes of a definition. But what the older logicians rejected as a useless truism, the recent embrace as a *new* and *important* observation.—In regard to its *novelty*:—Do Dr Whately and Mr Bentham imagine that any previous logician could ever have dreamt of denying that logic, in their acceptance of the terms, was at once an art and a science? Let them look into almost any of the older treatises, and they will find this explicitly admitted, even when the terms Art and Science are employed in senses far less vague and universal than is done by them.—As to its *importance*:—Do they suppose that a more precise and accurate conception of logic is thus obtained? The contrary is true. The term *Science* Dr Whately employs in its widest possible extension, for any knowledge considered absolutely, and not in relation to practice; and in this acceptance *every art* in its doctrinal portion must be a *science*. *Art* he defines the application of knowledge to practice; in which signification, *ethics, politics, religion*, and all other *practical sciences*, must be *arts*. Art and Science are thus distended till they run together. As philosophical terms, they are now altogether worthless; too universal to define; too vacillating between identity and difference, to distinguish. In fact, their application to logic, or any other subject, is hereafter only to undefine, and to confuse; expressing, as they do, not any essential opposition between the things themselves, but only the different points of view under which the same thing may be contemplated by us;—*every art being thus in itself also a science, every science in itself also an art*.—This Mr Bentham thinks the correction of a universal error,—the discovery of an important fact. If the question in the hands of the old logicians be frivolous, what is it in those of the new!*

* Such is the most favourable interpretation we can give of Dr Whately's meaning. But the language in which this meaning is conveyed is most ambiguous and inaccurate. *E. g.* he says:—"A science is conversant about knowledge only." (P. 56.) He cannot mean what the words express, that science has knowledge for its *object-matter*, for this is nonsense; and the words do not express, what, from the context, we must presume he means, that science has no end ulterior to the contemplative act of knowledge itself. Dr Whately thus means by *science* what Aristotle meant by *speculative science*, but how different in the precision of their definitions! Θεωρητικῆς μὲν (πιστημῆς) τέλος ἀληθιναῖα πρακτικῆς δ' ἔργον:—or, as Averroes has it, *Per speculativam sciunt ut sciunt; per practicam sciunt ut operemur*.—In like manner,

So much for the genus, now for the *object-matter*.—

Of Dr Whately's *Elements*, Mr Hinds says, and that emphatically :—" This treatise displays—and it is the only one that has clearly done so—the true nature and use of logic ; so that it may be approached, no longer as a dark, curious, and merely speculative study ; such as one is apt, in fancy, to class with astrology and alchemy." (Pref. p. viii.) These are strong words.

We are disposed to admit that Dr Whately, though not right, is perhaps not far wrong with regard to the " true nature and use of logic ;"—that he " *clearly displays*" that nature and use, is palpably incorrect ; and that his is " the *only* treatise which has clearly done so," is but another proof, that assertion is often in the inverse ratio of knowledge.

We shall not dwell on what we conceive a very *partial conception* of the science,—that Dr Whately makes the process of *reasoning* not merely its principal, but even its *adequate* object ; those of simple apprehension and judgment being considered not in themselves as constituent elements of thought, but simply as subordinate to argumentation. In this view Logic is made convertible with Syllogistic. This view, which may be allowed, in so far as it applies to the logic contained in the Aristotelic treatises

Dr Whately gives, without being aware of it, two very different definitions of the term *Art*. In one place (p. 1) it is said, " that logic may be called the *art* of reasoning, while, considered in reference to the practical rules, it furnishes to secure the mind from error in its deductions." This is evidently the Διαλεκτικὴ χεὶρς πραγμάτων of the Greek interpreters, the *logica docens* (*quæ tradit præcepta*) of the Arabian and Latin schools. Again, in another (p. 56) it is said, that " an *art* is the *application* of knowledge to *practice*." If words have any meaning, this definition (not to wander from logic) suits only the Διαλεκτικὴ ἐν χεὶρσι καὶ γυμνασίῃ πραγμάτων of the Greek, the *logica utens* (*quæ utitur præceptis*) of the Latin, Aristotelians. The *L. docens*, and the *L. utens*, are, however, so far from being convertible, that, by the great majority of philosophers, they have been placed in different genera. The Greek logicians denied the *L. docens* to be either science or art, regarding it as an instrument, not a part of philosophy ; the *L. utens*, on the contrary, they admitted to be a science, and a part of philosophy, but not separable and distinct. The Latins, on the contrary, held in general the *L. docens* to be a science, and part of philosophy ; the *L. utens* as neither, but only an instrument. Some, however, made the *docens* a science, the *utens* an art ; while by others this opinion was reversed, &c. These distinctions are not to be confounded with the *pure* and *applied* logics of a more modern philosophy.

now extant, was held by several of the Arabian and Latin schoolmen; borrowed from them by the Oxford Crackanthorpe, it was adopted by Wallis; and from Wallis it passed to Dr Whately. But, as applied to logic, in its own nature, this opinion has been long rejected, on grounds superfluously conclusive, by the immense majority even of the Peripatetic dialecticians; and not a single reason has been alleged by Dr Whately to induce us to waver in our belief, that the *laws of thought*, and not the *laws of reasoning*, constitute the adequate object of the science. This error, which we cannot now refute, would, however, be of comparatively little consequence, did it not,—as is notoriously the case in Dr Whately's *Elements*,—induce a perfunctory consideration of the laws of those faculties of thought; these being viewed as only subsidiary to the process of reasoning.

In regard to the "*clearness*" with which Dr Whately "displays the true nature and use of logic," we can only say, that, after all our consideration, we do not yet clearly apprehend what his views on this point actually are. In the very passages where he formally defines the science, we find him indistinct, ambiguous, and even contradictory; and it is only by applying the most favourable interpretation to his words, that we are able to allow him credit for anything like a correct opinion.

He says, that "the most appropriate office of logic (as science) is that of instituting an analysis of the *process of the mind in reasoning*," (p. 1;) and again, that "*the process (operation) of reasoning* is alone the appropriate province of logic." (Pp. 13, 140.)—The *process or operation of reasoning* is thus the *object-matter* about which the science of logic is conversant. Now, a definition which merely affirms that logic is the science which has the process of reasoning for its object, is not a definition of this science at all; it does not contain the differential quality by which logic is discriminated from other sciences; and it does not prevent the most erroneous opinions (it even suggests them) from being taken up in regard to its nature. Other sciences, as psychology and metaphysic, propose for their object (among the other faculties) the operation of reasoning, but this considered in its *real* nature: logic, on the contrary, has the same for its object, but only in its *formal* capacity; in fact, it has, in propriety of speech, nothing to do with the *process or operation*, but is conversant only with its *laws*. Dr Whately's definition, is therefore, not only incompetent, but delusive. It would confound Logic and Psycho-

logy and Metaphysic, and occasion those very misconceptions in regard to the nature of logic which other passages of the *Elements*, indeed the general analogy of his work, show that it was not his intention to sanction.

But Dr Whately is not only ambiguous; he is *contradictory*. We have seen, that, in some places, he makes the process of reasoning the adequate object of logic; what shall we think when we find, that, in others, he states that the total or *adequate object* of logic is *language*? But, as there cannot be two adequate objects, and as language and the operation of reasoning are not the same, there is therefore a contradiction. "In introducing," he says, "the mention of *language*, previously to the definition of logic, I have departed from established practice, in order that it may be clearly understood, that logic is *entirely conversant about language*; a truth which most writers on the subject, if indeed they were fully aware of it themselves, have certainly not taken due care to impress on their readers." * (P. 56.) And again:—"Logic is *wholly* concerned in the use of language." (P. 74.)

The term *logic* (as also *dialectic*) is of ambiguous derivation. It may either be derived from λόγος (*ισδιαιθετός*), reason, or our intellectual faculties in general; or from λόγος (*πρεφαιικός*), speech or language, by which these are expressed. The science of logic may, in like manner, be viewed either:—1°, as adequately and essentially conversant about the former, (the internal λόγος, *verbum mentale*;) and partially and accidentally about the latter, (the external λόγος, *verbum oris*;) or, 2°, as adequately and essentially conversant about the latter, partially and accidentally about the former.

The first opinion has been held by the great majority of logicians, ancient and modern. The second, of which some traces may be found in the Greek commentators of Aristotle, and in the more ancient Nominalists during the middle ages, (for the later scholastic Nominalists, to whom this doctrine is generally, but falsely, attributed, held in reality the former opinion,) was only fully developed in modern times by philosophers, of whom Hobbes may be regarded as the principal. In making *the analysis* of the *operation of reasoning the appropriate office of logic*, Dr Whately

* Almost all logicians, however, impress upon their readers, that logic is (not, indeed, *entirely*, but) partially and secondarily occupied with language as the vehicle of thought, about which last it is adequately and primarily conversant.

adopts the first of these opinions; in making *logic entirely conversant about language*, he adopts the second. We can hardly, however, believe that he seriously entertained this last. It is expressly contradicted by Aristotle, (*Analyt. Post. i. 10, § 7*); it involves a psychological hypothesis in regard to the absolute dependence of the mental faculties on language, once and again refuted, which we are confident that Dr Whately never could sanction; and, finally, it is at variance with sundry passages of the *Elements*, where a doctrine apparently very different is advanced. But, be his doctrine what it may, precision and perspicuity are not the qualities we should think of applying to it.

But if the Vice-Principal be an incompetent judge of what the Principal has achieved, he is a still more incompetent reporter of what all other logicians have not. If he had read even a hundredth part of the works it behoved him to have studied, before being entitled to assert that Dr Whately's "treatise is the *only* one that has *clearly* displayed the true use and nature of logic," he has accomplished what not one of his brother dialecticians of Oxford has attempted. But the assertion betrays itself: *πᾶσι τοῖς ἀπαιδευμένοις*. To any one on a level with the literature of this science, the statement must appear supremely ridiculous,—that the notions held of the nature and use of logic in the Kantian, not to say the Wolfian, school, are less clear, adequate, and correct, than those promulgated by Dr Whately.—A general survey, indeed, of the history of opinions on this subject would prove, that views essentially sound were always as frequent, as the carrying of these views into effect was rare. Many, speculatively, recognised principles of the science, which almost none practically applied to regulate its constitution.—Even the Scholastic logicians display, in general, more enlightened and profound conceptions of the nature of their science than any recent logician of this country. In their multifarious controversies on this matter, the diversity of their opinions on subordinate points is not more remarkable, than their unanimity on principal. All their doctrines admit of a favourable interpretation; some, indeed, for truth and precision, have seldom been equalled, and never surpassed. Logic they all discriminated from psychology, metaphysic, &c. as a *rational*, not a *real*,—as a *formal*, not a *material* science.—The few who held the adequate object of logic to be *things in general*, held this, however, under the qualification, that things in general were con-

sidered by logic only as they stood under the general forms of thought imposed on them by the intellect,—*quatenus secundis intentionibus substant.*—Those who maintained this object to be the *higher processes of thought*, (three, two, or one,) carefully explained, that the intellectual operations were not, in their own nature, proposed to the logician,—that belonged to the psychologist,—but only in so far as they were *dirigible*, or the subject of laws. The *proximate* end of logic was thus to analyze the canons of thought; its *remote*, to apply these to the intellectual acts.—Those, again, (and they formed the great majority,) who saw this object in *second notions*,* did not allow that logic was concerned with these second notions abstractly and in themselves, (that was the province of metaphysic,) but only in concrete *as applied to first*; that is, only as they were the instruments and regulators of thought.—It would require a longer exposition than we can afford, to do justice to these opinions,—especially to the last. When properly understood, they will be found to contain,

* The distinction (which we owe to the Arabians) of *first and second notions*, (*notiones, conceptus, intentiones, intellecta prima et secunda*), is necessary to be known, not only on its own account, as a highly philosophical determination, but as the condition of any understanding of the scholastic philosophy, old and new, of which, especially the logic, it is almost the Alpha and Omega. Yet, strange to say, the knowledge of this famous distinction has been long lost in "the (once) second school of the church."—Aldrich's definition is altogether inadequate, if not positively erroneous. Mr Hill and Dr Whately, followed by Mr Hyshe and the author of *Questions on Logic*, &c., misconceive Aldrich, who is their only authority, if Aldrich understood himself, and flounder on from one error to another, without even a glimpse of the light. (Hill, pp. 30—33; Whately, pp. 173—175; Hyshe, pp. 18, 19; *Questions*, pp. 10, 11, 71.) (Of a surety, no calumny could be more unfounded, as now applied to Oxford, than the "*clamour*," of which Dr Whately is apprehensive,—"*the clamour against confining the human mind in the trammels of the schoolmen!*")—The matter is worth some little illustration; we can spare it none, and must content ourselves with a definition of the terms.—A *first notion* is the concept of a thing *as it exists of itself*, and independent of any operation of thought; as, John, Man, Animal, &c. A *second notion* is the concept, not of an object as it is in reality, but of *the mode under which it is thought by the mind*; as, Individual, Species, Genus, &c. The former is the *concept of a thing*,—*real*,—*immediate*,—*direct*: the latter the *concept of a concept*,—*formal*,—*mediate*,—*reflex*. For elucidation of this distinction, and its applications, it is needless to make references. The subject is copiously treated by several authors in distinct treatises, but will be found competently explained in almost all the older systems of logic and philosophy.

in principle, all that has been subsequently advanced of any value in regard to the object-matter and scope of logic.

Nothing can be more meagre and incorrect than Dr Whately's sketch of the *History of Logic*. This part of his work, indeed, is almost wholly borrowed from the poverty of Aldrich. As specimens :—

Archytas,* by Whately as by Aldrich, is set down as inventor of the *Categories*; and this now exploded opinion is advanced without a suspicion of its truth. The same unacquaintance with philosophical literature and Aristotelic criticism is manifested by every recent Oxford writer who has alluded to the subject. We may refer to the *Excerpta ex Organo*, in usum Academicæ Juventutis,—to the *Oxonia Purgata* of Dr Tatham,—to Mr Hill's *Notes on Aldrich*,—to Mr Huyshe's *Logic*,—and to the *Philosophy of Aristotle* by Mr Hampden. This last, even makes the Stagirite to derive his moral system from the Pythagoreans; although the forgery of the fragments preserved by Stobæus, under the name of *Theages*, and other ethical writers of that school, has now been for half a century fully established. They stand likewise without an obelus in Dr Gaisford's respectable edition of the *Florilegium*. [The physical treatises, also, as those under the names of Ocellus Lucanus and Timæus Locrius, are of the same character; they are comparatively recent fabrications.] Aristotle would be, indeed, the sorriest plagiarist on record, were the thefts believed of him by his Oxford votaries not false only, but ridiculous. By Aldrich it is stated, as on indisputable evidence, that, while in Asia, he received a great part of his philoso-

* [On *Archytas*, I may refer the reader to three excellent monographs: by *Navarrus* (Copenhagen, 1820); by *Hartenstein* (Leipsic, 1833); and by *Gruppe* (Berlin, 1840).—The *Metaphysical*, *Physical*, and *Ethical* fragments, written in the Doric dialect, and bearing the name of Pythagorean philosophers, are *all*, to a critical reader, *obtrusively spurious*, and on *all*, this note has been superfluously branded by the German critics and historians of philosophy, for above half a century. Meiners began, and nearly accomplished, the exposition. Instead of Plato and Aristotle stealing their philosophies from the Pythagoreans, and their thefts remaining, by a miracle, for centuries, unknown, and even unsuspected; the forgers of these more modern treatises have only impudently translated the doctrines of the two philosophers into their supposititious Doric. Their non-exposure, at the time, is the strongest proof of the languid literature of the decline.]

phy from a learned Jew ; * and this silly and long derided fable even stands uncontradicted in the *Compendium* to the present day : while, by the Oxford writers at large, he is still supposed to have stolen his *Categories* and *Ethics* (to say nothing of his physical doctrines) from the Pythagoreans. What would Schleiermacher or Creuzer think of this !

In discriminating *Aristotle's merits in regard to logic*, Dr Whately, we are sorry to say, is vague and incorrect.

" No science can be expected to make any considerable progress, which is not cultivated on right principles. - - The greatest mistakes have always prevailed respecting the nature of logic ; and its province has, in consequence, been extended by many writers to subjects with which it has no proper connexion. Indeed, with the exception of Aristotle, (who is himself not entirely exempt from the errors in question,) hardly a writer on logic can be mentioned who has clearly perceived, and steadily kept in view throughout, its real nature and object." (P. 2.)

On the contrary, so far is Aristotle,—so far at least are his logical treatises which still remain, (and these are, perhaps, few to the many that are lost,) from meriting this comparative eulogium, that nine-tenths,—in fact, more than nineteen-twentieths,—of these treat of matters, which, if logical at all, can be viewed as the objects, not of *pure*, but only of an *applied* logic ; and we have no hesitation in affirming, that the incorrect notions which have prevailed, and still continue to prevail, in regard to the "nature and province of logic," are, without detracting from his merits, mainly to be attributed to the example and authority of the Philosopher himself.—The book of *Categories*, as containing an objective classification of real things, is metaphysical, not logical. The two books of *Posterior Analytics*, as solely conversant about demonstrative or necessary matter, transcend the limits of the formal science ; and the same is true of the eight books of *Topics*, as wholly occupied with probable matter, its accidents and applications. Even the two books of the *Prior Analytics*, in which the pure syllogism is considered, are swelled with extralogical discussions. Such, for example, is the whole doctrine of the *modality* of syllogisms as founded on the distinction of pure, necessary, and contingent matter ;—the consideration of the *real truth or falsehood* of propositions, and the power so irrelevantly attributed to the syllogism of *inferring a true conclusion from*

* [The Jews have even made Aristotle a native Israelite,—born at Jerusalem,—of the tribe of Benjamin,—and a Rabbi deep in the sacred books of his nation. (See Bartolocci *Bibliotheca Rabbinica*, t. i. p. 471, *sq.*)]

false premises;—the distinction of the *enthymeme*, through the *extraformal* character of its premises, as a reasoning from signs and probabilities;—the *physiognomic* syllogism, &c. &c. The same is true of the book *On Enouncement*; and matters are even worse with that on *Fallacies*, which is, in truth, only a sequel of the *Topics*. If Aristotle, therefore, did more than any other philosopher for the progress of the science; he also did more than any other to overlay it with extraneous lumber, and to impede its development under a precise and elegant form. Many of his successors had the correctest views of the object and scope of logic; and even among the schoolmen there were minds who could have purified the science from its adventitious sediment, had they not been prevented from applying their principles to details, by the implicit deference then exacted to the precept and practice of Aristotle.*

"It has been remarked," says Dr Whately, after Aldrich, "that the logical system is one of those few theories which have been begun and perfected by the same individual. The history of its discovery, as far as the main principles of the science are concerned, properly commences and ends with Aristotle. (P. 6.)—In so far as "the main principles of the science are concerned," this cannot be denied. It ought, however, to have been stated with greater qualification. Aristotle left to his successors, much to reject,—a good deal to supply,—and the whole to simplify, digest, and arrange.—In regard alone to the *deficiencies*:—If Dr Whately and the other Oxford logicians are right, (we think decidedly otherwise,) in adding the *fourth syllogistic figure*, (which, by the way, none of them, from Aldrich downwards, ever hint to the under-graduates not to be of Aristotelic origin,) the Stagirite is wrong in recognising the exclusive possibility of the other three (*Analyt. Pr.* i. 23, § 1;) and so far his system can hardly be affirmed by them to have been perfected by himself. To say nothing of the *five moods* subsequently added by Theophrastus and Eudemus, the extensive and important doctrine of

* [M. Barthélemy Saint-Hilaire, to whom, among many other valuable Aristotelic labours of high talent, we owe an excellent French translation of the *Organon*, with copious notes and introductions, has combated this opinion. (See the Preface to his first volume, especially pp. xvi.—xx, cxlii.) I still, however, remain unconvinced; though I cannot now detail my reasons.—Assuredly, I do not plead guilty to the charge of disparaging the genius of Aristotle; reverencing him as the *Prince of Philosophers*.]

hypotheticals,—a doctrine, in a great measure, peculiar and independent,—was probably, an original supplement by these philosophers; previous to which, the logical system remained altogether defective. [This requires some addition, and some modification.]

The following is Dr Whately's sketch of the fortune of Logic, from Aristotle down to the Schoolmen :—

“ The writings of Aristotle were not only absolutely lost to the world for about two centuries, [many, if not most, were always extant,] but seem to have been but little studied for a long time after their recovery. An art, however, of logic, derived from the principles traditionally preserved by his disciples, seems to have been generally known, and to have been employed by Cicero in his philosophical works; but the pursuit of the science seems to have been abandoned for a long time. Early in the Christian era the Peripatetic doctrines experienced a considerable revival; and we meet with the names of Galen and Porphyry, as logicians; but it is not till the fifth [sixth] century that Aristotle's logical works were translated into Latin by the celebrated Boethius. Not one of these seems to have made any considerable advances in developing the theory of reasoning. Of Galen's labours little is known; and Porphyry's principal work is merely on the *Predicables*. We have little of the science till the revival of learning among the Arabians, by whom Aristotle's treatises on this as well as on other subjects were eagerly studied.” (P. 7.)

In this sketch, Dr Whately closely follows Aldrich; and how utterly incompetent was Aldrich for a guide, is significantly shown by his incomparable (but still uncorrected) blunder of confounding *Galen* with *Alexander of Aphrodisias*! “ Circa annum Christi 140, interpretum princeps Galenus floruit, Ἐξηγητής, sive Expositor, κατ' ἑξήχην, dictus.” Galen, who thus flourished at nine years old, never deserved, never received the title of *The Commentator*. This designation, as every tyro ought to know, was exclusively given to Alexander, the oldest and ablest of the Greek interpreters of Aristotle, until it was afterwards divided with him by Averroes.—The names of *Theophrastus* and *Eudemus*, the great founders of logic after Aristotle, do not appear.—We say nothing of inferior logicians, but the *Aphrodisian* and *Ammonius Hermiæ* were certainly not less worthy of notice than Porphyry.—Of *Galen's* logical labours, some are preserved, and of others we know not a little from his own information and that of others. Why is it not stated, here or elsewhere, that the *fourth figure* has been attributed to Galen, and on what (incompetent) authority?—Nothing is said of the original logical treatises of *Boethius*, though his work on *Hypotheticals* is the most copious we possess.

—Had Dr Whately studied the subject for himself, he would hardly have failed to do greater justice to the Greek logicians. What does he mean by saying, "we have little of the science till the revival of learning among the Arabians?" Are Averroes and Avicenna so greatly superior to Alexander and Ammonius?

Dr Whately, speaking of the *Schoolmen*, says:—

"It may be sufficient to observe, that their fault did not lie in their diligent study of logic, and the high value they set upon it, but in their utterly mistaking the true nature and object of the science; and by the attempt to employ it for the purpose of physical discoveries, involving every subject in a mist of words, to the exclusion of sound philosophical investigation. Their errors may serve to account for the strong terms in which Bacon sometimes appears to censure logical pursuits; but that this censure was intended to bear against the extravagant perversions, not the legitimate cultivation, of the science, may be proved from his own observations on the subject, in his *Advancement of Learning*." (P. 8.)

It has been long the fashion to attribute every absurdity to the *Schoolmen*; it is only when a man of talent, like Dr Whately, follows the example, that a contradiction is worth while. The *Schoolmen*, (we except always such eccentric individuals as Raymond Lully,) had correcter notions of the domain of logic than those who now condemn them, without a knowledge of their works. They certainly did *not* "attempt to employ it for the purpose of physical discoveries." We pledge ourselves to refute the accusation, whenever any effort is made to prove it; till then, we must be allowed to treat it as a groundless, though a common calumny. —As to Bacon, we recollect no such reproach directed by him either against logic or against the scholastic logicians. On the contrary, "Logic," he says, "does not pretend to invent sciences, or the axioms of sciences, but passes it over with a *cuique in sua arte credendum*."* And so say the *Schoolmen*; and so says Aristotle.

* *Advancement of Learning*:—and similar statements, frequently occur in the *De Augmentis* and *Novum Organum*. The censure of Bacon, most pertinent to the point, is in the *Organum*, Aph. 63. It is, however, directed, not against the *Schoolmen*, but exclusively against Aristotle; it does not reprobate any false theory of the nature and object of logic, but certain practical misapplications of it; and, at any rate, it only shows that Bacon gave the name of *Dialectic* to *Ontology*. Aristotle did not corrupt physics by logic, but by metaphysic. The *Schoolmen* have sins of their own to answer for, but this, imputed to them, they did not commit.—[I refer with much pleasure to a very able article entitled "Faith and Science," of the American "Methodist Quarterly Review," in the number for April 1852, pp. 182, 183; where this subject is treated with much learning and acuteness.]

We are not satisfied with Dr Whately's strictures on *Locke, Watts, &c.*, but cannot afford the space necessary to explain our views. One mistake in relation to the former we shall correct, as it can be done in a few words. After speaking of Locke's animadversion on the syllogism, Dr Whately says:—"He (Locke) presently after inserts an encomium upon Aristotle, in which he is equally unfortunate; he praises him for the '*invention of syllogisms*,' to which he certainly had no more claim than Linnæus to the creation of plants and animals, or Harvey," &c. (P. 19.)—In the *first* place, Locke's words are, "*invention of forms of argumentation*," which is by no means convertible with "*invention of syllogisms*," the phrase attributed to him. But if syllogism had been the word, in one sense it is right, in another wrong. "Aristotle," says Dr Gillies, "*invented the syllogism*," &c.; and in that author's (not in Dr Whately's) meaning, this may be correctly affirmed.—But, in the *second* place, Dr Whately is wrong in thinking, that the word "*invention*" is used by Locke, in the restricted sense in which it is now almost exclusively employed, as opposed to *discovery*. In Locke and his contemporaries, to say nothing of the older writers, *to invent* is currently used for *to discover*. An example occurs in the sentence of Bacon just quoted; and in this signification we may presume that "*invention*" is here employed by Locke, as it was also thus employed in French, by Leibnitz, in relation to this very passage of Locke.

But from the History, to proceed to *the Science itself*.

Turning over a few pages, we come to an error not peculiar to Dr Whately, but shared with him by all logicians,—we mean the *Modality* of propositions and syllogisms; in other words, the *necessity, possibility, impossibility, contingency, &c.*, of their *matter*, as an object of logical consideration.

It has always been our wonder, how the integrity of logic has not long ago been purified from this metaphysical admixture. Kant, whose views of the nature and province of the science were peculiarly correct, and from whose acuteness, after that of Aristotle, every thing might have been expected, so far from ejecting the Modality of propositions and syllogisms, again sanctioned its right of occupancy, by deducing from it, as an essential element of logical science, the last of his four generic categories, or fundamental forms of thought. Nothing, however, can be clearer, than that this modality is no object of logical concernment. Logic is

a formal science; it takes no consideration of real existence, or of its relations, but is occupied solely about that existence and those relations which arise through, and are regulated by, the conditions of thought itself. Of the truth or falsehood of propositions, in themselves, it knows nothing, and takes no account: all in logic may be held true that is not conceived as contradictory. In reasoning, logic guarantees neither the premises nor the conclusion, but merely the *consequence* of the latter from the former; for a syllogism is nothing more than the explicit assertion of the truth of one proposition, *on the hypothesis* of other propositions being true in which that one is implicitly contained. A conclusion may thus be true in reality (as an assertion,) and yet logically false (as an inference.) *

But if truth or falsehood, as a material quality of propositions and syllogisms be extralogical, so also is their modality. Necessity, Contingency, &c., are circumstances which do not affect the logical copula or the logical inference. They do not relate to the connexion of the subject and predicate of the antecedent and consequent as terms in thought, but as realities in existence; they are metaphysical, not logical conditions. The syllogistic inference is always necessary; is modified by no extraformal condition; and is equally apodictic in contingent as in necessary matter.

If such introduction of metaphysical notions into logic is once admitted, there is no limit to the intrusion. This is indeed shown in the vacillation or indefinitude of Aristotle himself in regard to the number of the modes. In one passage (De Interp. c. 12, § 1),

* [In a certain sense, therefore, all logical inference is *hypothetical*,—hypothetically necessary; and the hypothetical necessity of logic stands opposed to *absolute* or *simple* necessity. The more recent scholastic philosophers have well denominated these two species,—the *necessitas consequentiæ* and the *necessitas consequentiæ*. The former is an *ideal* or *formal* necessity; the inevitable dependence of one *thought* upon another, by reason of our intelligent nature. The latter is a *real* or *material* necessity; the inevitable dependence of one *thing* upon another because of its own nature. The former is a logical necessity, common to all legitimate *consequence*, whatever be the material modality of its objects. The latter is an extralogical necessity, over and above the syllogistic inference, and wholly dependent on the modality of the matter *consequent*.—This ancient distinction, modern philosophers have not only overlooked but confounded. (See contrasted the doctrines of the Aphrodisian and of Mr Dugald Stewart, in *Dissertations on Reid*, p. 701 a, note *.)]

he indicates *four*—the *necessary*, the *impossible*, the *contingent*, the *possible*; and this enumeration has been generally received among logicians. In another (*Ibid.* § 9), he adds to these four modes *two others*, viz. the *true*, and, consequently, the *false*. Some logicians have accordingly admitted, but exclusively, these *six* modes; his Greek interpreters, however, very properly observe, (though they made no use of the observation,) that Aristotle did not mean by these enumerations to limit the number of modes to *four* or *six*, but thought only of signalling the more important. [In general, indeed, as previously stated, he speaks only of the *necessary* and *contingent*.] Modes may be conceived without end;—as the *certain*, the *probable*, the *useful*, the *good*, the *just*,—and what not? All, however, must be admitted into logic if any are: the line of distinction attempted to be drawn is futile. Such was the confusion and intricacy occasioned by the *four* or *two* modes alone, that the doctrine of modals long formed, not only the most useless, but the most difficult and disgusting branch of logic. It was, at once, the *criterium*, and the *crux*, *ingeniorum*. “*De modali non gustabit asinus*,” said the schoolmen; “*De modali non gustabit logicus*,” say we. This subject was only perplexed because different sciences were jumbled in it together; and modals ought to be entirely, on principle, (as they have been almost entirely in practice,) relegated from the domain of logic, and consigned to the grammarian and metaphysician. This was, indeed, long ago obscurely perceived by a profound but now forgotten thinker. “*Pronunciata illa*,” says Vives, “*quibus additur modus, non dialecticam sed grammaticam questionem habent*,” and Ramus also felt the propriety of their exclusion, though he was equally unable to explicate its reasons.*

* [M. Barthélemy Saint-Hilaire (*Logique d'Aristote*, T. I. pref. p. lxxv.) says:—“Théophraste et Endème, dont on invoque l'autorité, avaient combattu sur plusieurs points la théorie de la modalité; ils en avaient changé quelques règles; mais ils l'avaient admise comme partie intégrante de la théorie générale. Depuis eux, nul logicien n'a prétendu la supprimer. M. Hamilton est jusqu'à présent le seul, si l'on excepte Laurentius Valla, au xv^e siècle, qui ait proposé ce retranchement.”—Valla, whose *Dialectica* I take shame for overlooking, certainly does reject modals, as a species of logical proposition; but he does so on erroneous grounds. He confounds formal with material necessity; and alleges not a single valid reason for the retranchement which he proposes. The reduction of the Necessary and Contingent, to the Apodictic and Problematic, is modern, and, I think, erroneous. For all the *necessary* is not *apodictic* or demonstrable; and the *con-*

Dr Whately has very correctly stated:—

“It belongs exclusively to a syllogism, properly so called, *i. e.* a valid argument, so stated that its conclusiveness is evident from the mere *form* of the expression,) that if letters, or any other unmeaning symbols, be substituted for the several terms, the validity of the argument shall still be evident.” (P. 37.)

Here logic appears, in Dr Whately's exposition, as it is in truth, a distinct and self-sufficient science. What, then, are we to think of the following passages?—

“Should there be *no sign* at all to the common term, the quantity of the proposition, (which is called an *Indefinite* proposition,) is ascertained by the *matter*; *i. e.* the nature of the connection between the extremes, which is either Necessary, Impossible, or Contingent,” &c. &c. (P. 64.)—“As it is evident, that the truth or falsity of any proposition (its quantity and quality being known) must depend on the *matter* of it, we must bear in mind, that, in *necessary matter* all affirmatives are true, and negatives false; in *impossible matter*, vice versa; in *contingent matter*, all universals false, and particulars true: *e. g.* ‘all islands, (or, *some* islands,) are surrounded by water,’ must be true, because the *matter* is *necessary*: to say, ‘no islands, or *some—not*,’ &c., would have been false: again, ‘*some* islands are fertile,’ ‘*some* are not fertile,’ are both true, because it is Contingent Matter: put ‘*all*,’ or ‘*no*,’ instead of ‘*some*,’ and the propositions will be false,” &c. &c., (P. 67.)

In these passages, (which, it is almost needless to say, are only specimens of the common doctrine,) logic is reduced from an independent science to a scientific accident. *Necessary, impossible, and contingent* matter, are terms expressive of certain lofty generalisations from an extensive observation of real existence; and logic, inasmuch as it postulates a knowledge of these generalisations, postulates its own degradation to a precarious appendage,—to a fortuitous sequel, of all the sciences from which that knowledge must be borrowed. If in syllogisms, “unless unmeaning symbols can be substituted for the several terms, the argument is either unsound or sophistical;”—why does not the same hold good in propositions, of which syllogisms are but the complement? But A, and B, and C, know nothing of the necessary, impossible, contingent. Is logic a formal science in one chapter, a real science *tangent* is by no means convertible with the doubtful or *problematic*. There is here also a mixing of the subjective with the objective. In my view, modes are only material affections of the predicate, or, it may be, of the subject; and those, which from their generality, have been contemplated in logic, may, I think, be reduced to the relation of genus and species, and their consecution, thereby, recalled to the utmost simplicity. I agree with Mr Mansel, (Pref. p. 11.), if I do not misapprehend him.]

in another? Is it independent, as a constituted whole; and yet dependent, in its constituent parts?

We cannot pass without notice Dr Whately's employment of the term *Argument*. This word he defines, and professes to use in a "*strict logical sense*;" and gives us, moreover, under a distinct head, a formal enumeration of its other various significations in ordinary discourse. The *true logical* acceptance of the term, he, however, not only does not employ, but even absolutely *overlooks*; while, otherwise, his list of meanings is neither well discriminated, nor at all complete. We shall speak only of the logical omission and mistake.

"Reasoning (or discourse) expressed in words is *argument*; and an argument stated *at full length*, and in its *regular form*, is called a *sylogism*; the third part of logic, therefore, treats of the *sylogism*. Every argument consists of two parts; that which is *proved*; and that *by means of which* it is proved," &c. And in a note on this:—"I mean, in the strict technical sense; for, in popular use, the word *Argument* is often employed to denote the latter of these two parts alone: *e. g.* this is an *argument* to prove so and so," &c. (P. 72.)

Now, the signification, here (not quite correctly) given as the "popular use" of the term, is nearer to the "strict technical sense" than that which Dr Whately supposes to be such. In technical propriety *argument* cannot be used for *argumentation*, as he thinks,—but exclusively for its *middle term*. In this meaning the word (though not with uniform consistency) was employed by Cicero, Quintilian, Boethius, &c.; it was thus subsequently used by the Latin Aristotelians, from whom it passed even to the Ramists;* and this is the meaning which the expression always, first and most naturally, suggests to a logician. Of the older dialecticians, Crackanthorpe is the only one we recollect, who uses, and professes to use, the word *not* in its strict logical signification, but with the vulgar as convertible with Reasoning. In vindicating his innovation, he, however, misrepresents his authorities. Sanderson is, if we remember, rigidly correct. The example of Crackanthorpe, and of some French Cartesians, may have seduced Wallis; and Wallis's authority, with his own ignorance of logical

* Ramus, in his definitions, indeed, abusively extends the word to both the other terms; the middle he calls the *tertium argumentum*. Throughout his writings, however,—and the same is true of those of his friend Talæus,—*argumentum*, without an adjective, is uniformly the word used for the middle term of a syllogism; and in this he is followed by the Ramists and Semi-Ramists in general.

propriety, determined the usage of *Aldrich*—and of Oxford.—We say again *Aldrich's ignorance*; and the point in question supplies a significant example. "Terminus tertius [says he] cui quæstionis extrema comparantur, *Aristoteli Argumentum, vulgo Medium.*" The reverse would be correct:—"Aristoteli *Medium, vulgo Argumentum.*" This elementary blunder of the Dean, corrected by none, is repeated by nearly all his epitomators, expositors, and imitators. It stands in *Hill* (p. 118)—in *Huyshe* (p. 84)—in the *Questions on Logic* (p. 41)—and in the *Key to the Questions* (p. 101); and proves emphatically, that, for a century and a half, at least, the *Organon* (to say nothing of other logical works) could have been as little read in Oxford as the *Targum* or *Zendavesta*.

A parallel to this error is Dr Whately's statement, that "the *Major Premiss* is often called the *Principle.*" (P. 25.) The major premise is often called the *Proposition*; never the *Principle*. A principle may, indeed, be a major premise; but we make bold to say, that no logician ever employed the term *Principle* as a synonyme for major premise.

Speaking of the *Dilemma*, Dr Whately says:—"Most, if not all, writers on this point, either omit to tell, whether the *Dilemma* is a kind of *conditional* or of *disjunctive* argument, or else refer it to the latter class, on account of its having one disjunctive premiss; though it clearly belongs to the class of conditionals." (P. 100.) Most, if not all logical writers, do not omit to tell this, but Dr Whately, we fear, has omitted to consult them; and the opinion he himself adopts, so far from being held by few or none, has been, in fact, long the catholic doctrine. For every one logician, during the last century, who does not hold the dilemma to be a conditional syllogism, we could produce ten who do.

Dr Whately,—indeed all the Oxford logicians,—adopts the inelegant division of the *Hypothetical* proposition and syllogism into the *Conditional* and *Disjunctive*. This is wrong in itself. The name of the genus should not, without necessity, be confounded with that of a species. But the terms *Hypothetical* and *Conditional* are in sense identical, differing only in the language from which they are taken. It is likewise wrong on the score of authority; for the words have been used as synonymous by those logicians who, independently of the natural identity of the terms, were best entitled to regulate their conventional use.—Boethius, the first among the Latins who elaborated this

part of logic, employs indifferently the terms *hypotheticus*, *conditionalis*, *non simplex*, for the genus, and as opposed to *categoricus* or *simplex*; and this genus he divides into the *Propositio et Syllogismus conjunctivi* (called also *conjuncti*, *connexi*, *per connexionem*.) equivalent to Dr Whately's Conditionals; and into the *Propositio et Syllogismus disjunctivi* (also *disjuncti*, *per disjunctionem*.) Other logicians have employed other, none better, terms of distinction; but, in general, all who had freed themselves of the scholastic slime, avoided the needless confusion to which we object.

But, to speak now of *Hypotheticals in their Aristotelic meaning*, Dr Whately says:—

"Aldrich has stated, through a mistake, that Aristotle utterly despised hypothetical syllogisms, and thence made no mention of them; but he did indicate his intention to treat of them in some part of his work, which either was not completed by him according to his design, or else (in common with many of his writings) has not come down to us." (P. 104.)

Any ignorance of Aristotle on the part of Aldrich is conceivable, but in his censure Dr Whately is not himself correct. With the other Oxford logicians, he never suspects the *Συλλογισμοὶ ἐξ ὑποθέσεως* of Aristotle and our hypothetical syllogisms, net to be the same. In this error, which is natural enough, he is not without associates even of distinguished name. Those versed in Aristotelic and logical literature are, however, aware, that this opinion has been long, if not exploded, at least rendered extremely improbable. We cannot at present enter on the subject, and must content ourselves with stating, that hypothetical syllogisms, in the present acceptation, were first expounded, and the name first applied to them by Theophrastus and Eudemus. The latter, indeed, clearly discriminated such hypothetical syllogisms from those of Aristotle; and, what has not, we believe, been observed, even Boethius expressly declares the *Συλλογισμοὶ ἐξ ὁμολογίας* of the philosopher to be really categorical, while in regard to the *Συλλογισμοὶ εἰς τὸ ἀδύνατον*, there is no ground of doubt. The only reason for hesitation arises from the passage, (*Analyt. Pr. i. 44, § 4.*) in which it is said, that there are *many other* syllogisms concluding *by hypothesis*, and these the philosopher premises to discuss. Of what nature these were, we have now no means even of conjecture. If we judge from Aristotle's notion of hypothesis, and from the syllogisms he calls by that name, we should infer that they had no analogy to the hypotheticals of

Theophrastus;* and it will immediately be seen, that a complete revolution in the nomenclature of this branch of logic was effected subsequently to Aristotle. We may add, that no reliance is to be placed in the account given by Pacius of the Aristotelic doctrine on this point: he is at variance with his own authorities, and has not attentively studied the Greek logicians.

So far we state only the conclusions also of others. The following observation, as farther illustrating this point, will probably surprise those best qualified to judge, by its novelty and paradox. It must appear, indeed, at first sight, ridiculous to talk, at the present day, of discoveries in the *Organon*. The certainty of the fact is, however, equal to its improbability. The term *Categorical* (κατηγορητικός), applied to proposition or syllogism, in contrast to *Hypothetical* (ὑποθετικός), we find employed in all the writings extant of the Peripatetic School, subsequent to those of its founder. In this acceptation it is universally applied by the interpreters of Aristotle, up to the Aphrodisian; and previously to him, we certainly know that it was so used by Theophrastus and Eudemus. Now, no logician, we believe, ancient or modern, has ever remarked, that it was not understood in this signification by the philosopher himself.† The Greek commentators on the *Organon*,

* [M. Barthélemy Saint-Hilaire (*Logique D'Aristote*, T. I. Pref. p. lx. sq. and T. IV. Top. i. 8, 9, notes) has done me the honour to controvert this opinion, and contends that the Hypothetical syllogisms of Aristotle, are the same with those which from Theophrastus have descended to us under that name. But however ingenious his arguments, to me they are not convincing; and to say nothing of older authorities, he has also against him Dr Waitz, the recent and very able editor of the *Organon* in Germany.—I am now, indeed, more even than formerly, persuaded, that our hypotheticals are not the reasonings from hypothesis of the father of logic; for I think it can be shewn, that our hypothetical and disjunctive syllogisms are only *immediate* inferences, and not therefore entitled, in Aristotelic language, to the style of syllogisms at all.]

† [M. Peisse, in his extensive logical reading, has found the following unexclusive, though merely incidental, observation by the thrice learned *Gerard John Vossius*:—"Nusquam in Aristotele syllogismus categoricus opponitur hypothetico." (*De Natura Artium*, L. iv. c. 8, § 8.)—I have also met with an earlier authority, in *Cardanus*; but he states only that Aristotle very frequently uses *categoric* for *affirmative*, not that he always does so. (*Contr. Log.* lxxiv.) With these individual and partial exceptions, the general statement in the text stands good.]

Boethius, I think, has greatly contributed to this confusion of the terms. In his versions from the *Organon*, he uniformly translates Aristotle's κατηγορητικός (*affirmative*.) by *predicativus*; and Aristotle's καταφαιτικός, (a mere

indeed, once and again observe, in particular places, that the term *categorical* is there to be interpreted *affirmative*; but none has made the general observation, that it was *never* applied by Aristotle in the sense in which it was exclusively usurped by themselves. But so it is. Throughout the *Organon* there is not to be found a single passage, in which *categorical* stands opposed to *hypothetical* (ἢ ὑποθετικῶς); there is not a single passage in which it is not manifestly in the meaning of *affirmative*, as convertible with καταφατικῶς, and opposed to ἀποφατικῶς and σιτητικῶς. Nor is the induction scanty. In the *Prior Analytics* alone, the word occurs at least *eighty-five* times.—Nay, farther; as this never was, so there is another term always employed by Aristotle in contrast to his syllogisms by hypothesis. The syllogisms of this class, (whether they conclude by *agreement*, or through a *reductio ad absurdum*,) he uniformly opposes to those which conclude διακτικῶς, *ostensively*; and the number of passages in which this opposition occurs are not a few.—*Categorical*, in our signification, is thus not of Aristotelic origin. The change in the meaning of the term was undoubtedly, we think, introduced by Theophrastus. The marvel is, that no logician or commentator has hitherto signalized the contrast between the Aristotelic signification of the word, and that which has subsequently prevailed.*

We may allude (we can do no more) to another instance, in which Aristotle's meaning has been almost universally mistaken; and to the authority of this mistake we owe the introduction of an illogical absurdity into all the systems of logic. We refer to the *Enthymeme*.—On the vulgar doctrine this is a species of reasoning, distinguished from the syllogism proper, by having one or other of its premises, not expressed, but understood; and this distinction, without a suspicion either of its legitimacy or origin, is fathered on the Stagirite.—The division of syllogism and enthymeme, in *this* sense, would involve nothing less than a discrimination of species between the reasoning of logic and the reasoning of ordinary discourse; syllogism being the form pecu-

synonyme,) *affirmativus*: whereas, in his original writings, he uses the term, *prædicativus* for καταφατικῶς, in the post-Aristotelic signification.—*Apuleius*, on the contrary, (followed by *Cassiodorus* and *Isidore of Seville*,) always employs *dedicativus* in opposition to *abdicativus*; and *prædicativus* in opposition to *conditionalis*. And rightly. (De Dogm. Plat. l. iii.)]

* [See Note (†) to p. 152.]

liar to the one, enthymeme that appropriate to the other.—Nay, even this distinction, if admitted, would not avail; syllogism and enthymeme being distinguished as two intralogical forms of argumentation. Those who defend the distinction are thus driven back on the even greater absurdity,—of establishing an essential difference of form, on an accidental variety of expression,—of maintaining that logic regards the accident of the external language, and not the necessity of the internal thought. This, at least, is not the opinion of Aristotle, who declares :—“ *Syllogism and Demonstration belong not to the outward discourse, but to the discourse which passes in the mind* :—Ὁὐ πρὸς τὸν ἔξω λόγον ἡ ἀπόδειξις, ἀλλὰ πρὸς τὸν ἐν τῇ ψυχῇ ἐπὶ αὐτῇ ὁ συλλογισμός.” (Analyt. Post. i. 10, § 7.)—But if the distinction, in its general nature, be unphilosophical, it is still more irrational at the hands of its reputed author. For Aristotle distinguishes the enthymeme from the mere syllogism, as a reasoning of a peculiar *matter*,—from *signs* and *likelihoods*; so that, if he ever-and-abeve discriminated these by an accident of *form*, he would divide the genus by *two differences*, and differences of a merely *contingent association*. Yet, strange to say, this improbability has been believed;—believed without any cogent evidence;—believed from the most ancient times; and even when the opinion was at last competently refuted, the refutation was itself so immediately forgotten, that there seems not to be at present a logical author (not to say in England, but) in Europe, who is even aware of the existence of the controversy.*

A discussion of the question would exceed our limits. For those who may wish to study the point, we may briefly indicate the sources of information; and these, though few, will be found, we think, to be exhaustive.

Towards the conclusion of the fifteenth century, the celebrated *Rodolphus Agricola*, († 1485,) in his posthumous book, *De Inventione Dialectica*, recognises it as doubtful, whether Aristotle meant to discriminate the Enthymeme from the syllogism, by any peculiarity of *form*; and *Phrissemius* in his *Scholia* on that book, (1523), shows articulately, that the common opinion was at variance with the statements of the Philosopher. Without, it is

* In this country, some years ago, the question was stated in a popular miscellany, with his usual ability, by a learned friend to whom we pointed out the evidence; but none of the subsequent writers have profited by the information.

probable, any knowledge of Phrissemius, the matter was discussed by *Majoragius*, in his *Reprehensiones contra Nizolium*, and his *Explanationes in Aristotelis Rhetoricam*, the latter in 1572. Twenty-five years thereafter, *Julius Pacius* (who was not apparently aware of either) argued the whole question on far broader grounds; and, in particular, on the authority of four Greek MSS., ejected as a gloss the term ἀτελής (*imperfectus*), (*Analyt. Pr. ii. 27, § 3.*) on which the argument for the common doctrine mainly rests; which has been also silently done by the Berlin Academicians, in their late splendid edition of Aristotle's works, on the principal MSS. of the *Organon*, on which they found, [as also more recently by Waitz.] We may notice, that the *Masters of Louvain*, in their commentary on the logical treatises of Aristotle (1535), observe, that "the word *imperfectus* is not to be found in some codices, but that it ought to be supplied, is shewn, both by the Greek [printed] copies and by the version of Boethius." Scaynus, in his *Paraphrasis in Organum* (1599), adopts the opinion without arguing the question; and he does not seem to have been aware even of the Commentary of Pacius, published three years before. About 1620, *Corydaleus*, bishop of Mityleno, who had studied in Italy, maintained in his *Logic* the opinion of Pacius, but without additional corroboration; though in his *Rhetoric* (reprinted by Fabricius, in the *Bibliotheca Græca*), he adheres to the vulgar doctrine. [*Becmanus* (Origines, 1608, and *Manuductio*, 1626,) and *Heumannus* (Poecilæ, 1729,) have nothing new or determinate, though they moot the question.] In 1724, *Facciolati* expanded the argument of Pacius—for he, as the others, was ignorant of Scaynus, Majoragius, Phrissemius, Agricola, &c., and adds nothing of his own except an error or two—into a special *Acroama*: but his eloquence was not more effective than the reasoning of his predecessors; and the question again fell into complete oblivion. Any one who competently reargues the point, will have both to supply and to correct.*

* For example.—Pacius (whom Facciolati, by rhetorical hyperbole, pronounces—"Aristotelis Interpres, quot sunt, quot fuerunt, quotque futuri sunt, longe præstantissimus,") establishes it as one of the main pillars of his argument, that the *Greek interpreters did not acknowledge the term ἀτελής*:—"quoniam Johannes Grammaticus hic nullam ejus mentionem facit; et tam ipse, quam Alexander, superiori libro, explicantes definitionem syllogismi ab Aristotele traditam, ac distinguentes syllogismum ab argumentatione constante ex una propositione, non vocant hanc argumentationem *enthymema*,

We proceed to consider a still more important subject—the nature of the *Inductive* inference; and regret that we cannot

sed syllogisum *μονολήμματος*.” (Comm. in *Analyt. Pr.* ii. 27, § 3.)—Pacius is completely wrong.—Philoponus, or rather Ammonius Hermiae, on the place in question (*Anal. Pr.* ii. c. 27, § 3.) states, indeed, (as far as we recollect, for our copy of his Commentary is not at hand,) nothing to the point. [On since referring to the passage, we find that too much had been conceded. M. Peisse, too, notices its irrelevancy.] The fallacy of such negative evidence is however shown in his exposition of the *Posterior Analytics*, where he says;—“*Ἐνθύμημα δὲ εἶρεται, ἀπὸ τοῦ καταλιμπάνειν τῷ ἢ ἐνθυμίσθαι τὴν μίαν προτάσειν.*” (f. 4. a. edit. Ald. 1534.) Ammonius also, On the five words of Porphyry (f. 5 a, ed. Ald. 1546) expressly defines the Enthymeme—“*A syllogism with one proposition unexpressed; hence called an imperfect syllogism.*” How inaccurate, moreover, Pacius is in regard to the still higher authority of Alexander, (whose interpretation of the *second* book of the *Prior Analytics*, which contains the passage in question, is still in MS., and probably spurious,) may be seen by his Commentary on the first book of the *Prior Analytics*, (f. 7. a. b. edit. Ald. 1534,) compared with his Commentary on the *Topics*, (pp. 6, 7, edit. Ald. 1513.) This last we shall quote. He is speaking of Aristotle's definition of the Syllogism:—“*Τεθίεται*” δι᾽ ἡπὲν ἀλλ’ οὐ “*τεθίετος*,” ὡς τινες ἀξιοῦσιν, αἰτιώμενοι τὸν λόγον,—ὅτι μὴδὲν συλλογιστικῶς δι᾽ ἑνὸς τεθίετος δέικνυται, ἀλλ’ ἐκ δύο τὸ ἐλάχιστον. Οὐδὲ γὰρ οἱ περὶ Ἀντίπατρον (Tarsensem Tyriumve?) *μονολήμματα* τοὺς συλλογισμοὺς λέγουσιν, οὐκ εἰσὶ συλλογισμοί, ἀλλ’ ἐνδεῆς ἱερωνύμους. — Τοιούτοι δὲ εἰσὶ καὶ οἱ ῥητορικοὶ συλλογισμοί, οὓς ἐνθυμήματα λέγομεν καὶ γὰρ ἐν ἐκείνοις δοκεῖ γίνεσθαι διὰ μιᾶς προτάσεως συλλογισμὸς, τῷ τὴν ἑτέραν γνώριμον εἶναι ὑπὸ δικάστην, ἢ τὴν ἀκροατὴν προστίθεται οἷον, κ. τ. λ. — Διὸ οὐδὲ οἱ τοιοῦτοι κυρίως συλλογισμοί, ἀλλὰ το ὅλον, ῥητορικοὶ συλλογισμοί. Ἐφ’ ὧν οὐ μὴ γνώριμὸν ἔστι τὸ παραλειπόμενον, οὐκ ἔστιν ἐπὶ τούτων οἷον τε τὸν δι᾽ ἐνθυμήματος γίνεσθαι συλλογισμόν καὶ γὰρ καὶ ἀπ’ αὐτοῦ τοῦ ὀνόματος συλλογισμὸς συνθεσὶν τινα λόγων ἵσκει σημαίνειν ὥστε καὶ ἐσφαλῆσθαι, ψήφον.—From these passages, (which are confirmed by the anonymous Greek author of the book “*Touching Syllogisms*,” and by the Scholiast in Waitz, I. p. 48,) it is manifest against Pacius:—1°, That the *Ἐνθύμημα* was used by the oldest commentators on Aristotle in the modern signification, as a syllogism of one expressed premise; and, 2°, That the *συλλογισμὸς μονολήμματος* was not a term of the Aristotelian, but of the Stoical School. This appears clearly from Sextus Empiricus, (*Inst.* ii. § 167; *Contra Math.* viii. § 443; ed. Fabr.) Boethius, and all the later Greek logicians, (with the partial variation of Magentinus and Pachymeres,) also favour the common opinion. Their authority is, however, of little weight, and the general result of the argument stands unaffected.—In these errors, it is needless to say, that Pacius is followed by Corydaleus and Faccioliati.

[I may here annex a general statement of the various meanings in which the term Enthymeme has been employed; and though I cannot tarry to give articulate references to the books in which the several opinions are to be found, this I think will exhibit a far completer view of the multiform significations of the word than is elsewhere to be found.

echo the praises that have been bestowed on Dr Whately's analysis of this process. We do not, indeed, know the logician

These meanings may be first distributed into four categories, according as the word is employed to denote:—I. *A thought or proposition in general*;—II. *A proposition, part of a syllogism*;—III. *A syllogism of some peculiar matter*;—IV. *A syllogism of an unexpressed part*.

I.—Enthymeme denotes *a thought or proposition*:

1. *Of any kind*.—See Cicero, Dionysius of Halicarnassus, Demetrius, Quintilian, Sopater, and one of the anonymous Scholiasts on Hermogenes.
2. *Of any kind, with its reason annexed*.—See Aristotle, Quintilian.
3. *Of imagination or feeling, as opposed to intellection*.—Isocrates, Author of the Rhetoric to Alexander, the Halicarnassian.
4. *Inventive*.—Xenophon.
5. *Facetious, witty, antithetic*.—Quintilian, Juvenal, Agellius.

II.—Enthymeme denotes *a proposition, part of a syllogism*:

1. *Any one proposition*.—Held by Neocles (?); See Quintilian, Scholiast on Hermogenes, Greek author of the Prolegomena Statum, Matthæus Camariota.
2. *Conclusion of an Epichirema*.—Hermogenes, Scholiast on Hermogenes, Rufus, Greek author of the Rhetorical Synopticon, Maximus Planudes, Georgius Gemistus Pletho, M. Camariota.

This category it is impossible always rigorously to distinguish from IV.

III.—Enthymeme denotes *a syllogism of a certain matter*:

1. *Rhetorical of any kind*.—Aristotle, Curius Fortunatianus, Harpocratian, Scholiast on Hermogenes, M. Camariota.
2. *From consequents, or from opposites—repugnants, contraries, dissimilars, &c.*—Cicero, Quintilian, Hermogenes, Apsines, Julius Rufinianus.
3. (Leaving that from consequents to be called Epichirema,) *from opposites alone*.—Cornificius, Author of the Rhetoric to Hereunius, Quintilian, Hermogenes, Apsines.
4. *From signs and likelihoods*.—Aristotle's special doctrine.

IV.—Enthymeme denotes *a syllogism in which there is unexpressed*:

1. a). *One or two propositions*.—So Victorinus in Cassiodorus. See also Cicero, Quintilian and Boethius.
b). *One proposition*; and here:
2. *Any proposition*.—Held by Neocles (?) Quintilian, and the Greek author of the Prolegomena Rhetorica; see also Scholiast on Hermogenes and G. Pletho. Aristotle and Demetrius allow this, as a frequent accident of rhetorical syllogisms.
3. *Either premise*.—This is the common doctrine of the Greek logicians, following Alexander and Ammonius, and followed by the Arabians, and of the Schoolmen following Boethius, Cassiodorus, Isidore of Seville, and the Arabians. It is also the doctrine of the moderns. All these parties agree in fathering it on the Stagirite.
4. *The major premise*; (the non-expression of the *minor* being allowed to the common syllogism.)—This is held by two Greek logicians,—Leo Magentinus and Georgius Pachymeres. (By the way I may notice that Saxius is wrong in carrying up the former to the seventh century; for Leo

who has clearly defined the proper character of dialectical induction, and there are few who have not in the attempt been guilty of the grossest blunders. Aristotle's doctrine on this point, though meagre, is substantially correct; but succeeding logicians, in attempting to improve upon their master, have only corrupted what they endeavoured to complete. As confusion is here a principal cause of error, we must simplify the question by some preliminary distinctions and exclusions.

The term Induction (*παράγωγος*) has been employed to denote three very different things:—1°, The objective process of *investigating* individual facts, as preparatory to illation;—2°, A *material illation* of the universal from the singular, warranted either by the general analogies of nature, or by special presumptions afforded by the object-matter of any real science;—3°, A *formal illation* of the universal from the individual, as legitimated solely by the laws of thought, and abstract from the conditions of this or that particular matter.

That the *first* of these, an inventive process or process of discovery, is beyond the sphere of a critical science, is manifest; nor has Induction, in this abusive application of the term, been ever arrogated to Logic. By logicians, however, the *second* and *third* have been confounded into one, and, under every phasis of misconception, treated as a simple and purely logical operation. Yet nothing can be clearer, than that these constitute two separate operations, and that the *second* is not properly a logical process at all. In logic, all inference is determined *ratione formæ*, the conclusion being necessarily implied in the very conception of the premises. In this second Induction, on the contrary, the illation is effected *vi materiæ*, on grounds not involved in the notion of its

could not be older than the ninth, seeing that he quotes Psellus.) The same opinion I find maintained by Cardanus; but on a misinterpretation of Averroes.

5. *The conclusion*.—The doctrine of Ulpian the commentator of Demosthenes, of Minucianus, and of a Scholiast on Hermogenes. Though this, as an exclusive opinion, be not right, modern logicians are still farther wrong, in their otherwise erroneous doctrine of Enthymeme, for not recognising as a third order, the non-expression of the conclusion; since this is an ellipsis of the very commonest in our practice of reasoning. Keckermannus, indeed, (ignorant of the ancient doctrine,) while admitting the practice, expressly refuses to it the name of Enthymeme.
6. c). *Two propositions*.—This opinion might seem to be held by some of the authorities under category II.]

antecedent. To take, for example, Dr Whately's instance : The naturalist who, from the proposition—"Ox, sheep, deer, goat, (*i. e. some* horned animals,) ruminates," infers the conclusion—"All horned animals ruminates," may be warranted in this procedure by the material probabilities of his science ; but his illation is formally, is logically vicious. Here, the inference is not necessitated by the laws of thought. The *some* of the antecedent, as it is not *thought*, either to contain or to constitute, so it does not mentally determine, the *all* of the consequent ; and the reasoner must transcend the sphere of logic, if he would attempt to vindicate the truth of his conclusion. Yet, this, by the almost unanimous consent of logicians, has been admitted into their science. Induction they have distinguished into *perfect* and *imperfect* ; according as the *whole* concluded was inferred from *all*, or from *some* only, of its constituent parts. They thus involved themselves in a twofold absurdity. For, *on the one hand*, they recognised the consequence of the Imperfect Induction to be legitimate, though, admitting it to be not necessarily cogent ; as if logic could infer with a degree of certainty inferior to the highest : and, *on the other*, they attempted to corroborate this imbecillity, by calling in real probabilities,—physical, psychological, metaphysical ; which logic could neither, as a formal science, know, nor, as an apodictic science, take into account. This was a corollary of the fundamental error to which we have already alluded,—the non-exclusion of all material modality from the domain of logic. Thus, it was maintained, that, in *necessary matter*, the Imperfect Induction was necessarily conclusive ; as if logic could be aware of what was necessary matter,—as if, indeed, this itself were not the frequent point of controversy in the objective sciences, and did not, in fact, usually vary in them, as these same sciences advanced.*

* [Thus, Sir Thomas Browne, expressing the doctrine of naturalists in the seventeenth century, declared it to be "*impossible, that a quadruped should lay an egg, or have the bill of a bird.*" To the older logicians, therefore, this proposition was of *impossible matter*. The subsequent discovery of the *Ornithorhynchus Paradoxus* has shown to the naturalist that his twofold impossibility was possible, and the proposition is, consequently, to our recent logicians one of *possible matter*.—"Dogs bark:" this was erst of *necessary matter* ; "dogs" were then "all dogs," and the inductive conclusion compulsory and universal. (Wolffii Logica, § 479.) Since an observation of the dogs of Labrador (I think), the proposition, as in our zoologies, so in our logics, has fallen to *contingent matter* ; "dogs" are now "some dogs," and

The two first processes to which the name of Induction has been given, being thus excluded, it remains only to say a few words in explanation of the *third*,—of that Induction, with which alone logic is concerned, but the nature of which has, by almost all logicians, been wholly misrepresented.*

Logic does not consider things as they exist really and in themselves, but only the general forms of thought under which the mind conceives them; in the language of the schools, logic is conversant, not about *first*, but about *second*, notions.† Thus a logical inference is not determined by any objective relation of Causality subsisting between the terms of the premises and conclusion, but solely by the subjective relation of Reason and Consequent, under which they are construed to the mind in thought.‡ The notion conceived as determining, is the *Reason*; the notion conceived as determined, is the *Consequent*; and the relation between the two is the *Consequence*. Now, the mind can think two notions under the formal relation of consequence, only in *one or other* of two modes. Either the determining notion must be conceived as a *whole*, containing (under it), and therefore necessitating, the determined notion, conceived as its *contained part or parts*;—or the determining notion must be conceived as the *parts constituting*, and, therefore, necessitating the determined notion, conceived as their *constituted whole*. Considered, indeed, absolutely and in themselves, the *whole* and *all the parts* are identical. *Relatively, however, to us, they are not*; for in the order of thought, (and logic is only conversant with the laws of thought), the whole may be conceived first, and then by mental analysis separated into its parts; or the parts may be conceived first, and then by mental synthesis collected into a whole. Logical inference is thus of *two* and only of two, kinds:—it must proceed, either *from the whole to the parts*, or *from the parts to the whole*; and it is only under the character of a constituted or containing

the inductive conclusion, petitory, particular, or false. And so on. But in logic, as in theology,—*Variasse erroris est.*]

* [What follows, on the logical doctrine of Induction, is, as it has generally been admitted to be, I am convinced, true. I would, however, *now* evolve it in somewhat different language. Compare among others:—*Woolley's Logic* (p. 120, sq.); *Mansel's Aldrich* (App. p. 50, sq.)]

† (See p. 139, note (*).)

‡ [The logical relation of *Reason and Consequent*, as more than a mere corollary of the law of *Non-contradiction*, in its three phases, is, I am confident of proving, erroneous.]

whole, or of a constituting or contained *part*, that any thing can become the term of a logical argumentation.

Before proceeding, we must, however, allude to the nature of the *whole* and *part*, about which logic is conversant. Those are not real or essential existences, but creations of the mind itself, in secondary operation on the primary objects of its knowledge. Things may be conceived the *same*, inasmuch as they are conceived the *subjects of the same attribute*, or collection of attributes, (*i. e.* of the same nature):—inasmuch as they are conceived the same, they must be conceived as *the parts constituent of, and contained under a whole*:—and as they are conceived the same, only as they are conceived to be the subjects of the same nature, *this common nature must be convertible with that whole*. A logical or universal whole is called a *genus* when its parts are thought as also containing wholes or species; a *species* when its parts are thought as only contained parts or individuals. Genus and species are each called a *class*. Except the highest and the lowest, the same class may thus be thought, either as a genus, or as a species.

Such being the nature and relations of a logical whole and parts, it is manifest what must be the conditions under which the two kinds of logical inference are possible. The one of these, the process from the whole to the parts, is *Deductive* reasoning, (or Syllogism proper); the other, the process from the parts to the whole, is *Inductive* reasoning. The former is governed by the rule:—*What belongs (or does not belong) to the containing whole, belongs (or does not belong) to each and all of the contained parts*. The latter by the rule:—*What belongs (or does not belong) to all the constituent parts, belongs (or does not belong) to the constituted whole*. These rules exclusively determine all *formal* inference; whatever transcends or violates them, transcends or violates logic. Both are equally absolute. It would be not less illegal, to infer by the Deductive syllogism an attribute, belonging to the whole, of something it was not conceived to contain as a part; than by the Inductive, to conclude of the *whole*, what is not conceived as a predicate of *all* its constituent parts. In either case, the consequent is not *thought, as determined by the antecedent*;—the premises do not involve the conclusion.

The Deductive and Inductive processes are elements of logic equally essential. Each requires the other. The former is only

possible through the latter; and the latter is only valuable as realizing the possibility of the former. As our knowledge commences with the apprehension of singulars, every *class or universal whole* is consequently only a knowledge *at second-hand*. Deductive reasoning is thus not an original and independent process. The universal major proposition, out of which it develops the conclusion, is itself necessarily the conclusion of a foregone Induction, and, mediately or immediately, an inference,—a collection, from individual objects of perception, or self-consciousness. Logic, therefore, as a definite and self-sufficient science, must equally vindicate the *formal* purity of the synthetic illation, by which it ascends to its wholes, as of the analytic illation, by which it re-descends to their parts. (See Note (*) p. 173.)

Not only is the Deductive, thus, in a general way, dependent for its possibility on the Inductive, syllogism; the former is, what has not been observed,—in principle and detail,—in whole and in part,—in end and in means,—in perfection and imperfection, precisely a counterpart or inversion of the latter. The attempts that have been made by almost every logician, except (*perhaps*?) Aristotle,* to assimilate and even identify the two

* [I said *perhaps*, for Aristotle in his doctrine of Induction, in fact, implicitly contradicts himself. In his development of the inductive process, he is compelled to recognise, though he was not prepared to signalise, *the universal quantification of the predicate in affirmative propositions*; a quantification which he elsewhere, once and again, explicitly condemns, as, in all cases, absurd. It was the detection of this his inconsistency, which first led me to the conviction, that the *predicate of an affirmative proposition may, formally, or by the laws of thought, be universal*; and from thence, again, to the conviction, (after this article was written), that *the predicate in propositions, both affirmative and negative, should be unexclusively quantified in logical language, as it is in logical thought*.

Here M. Peisse has the following note:—"This '*perhaps*' is very right, for it is by no means certain that Aristotle gave to the Inductive syllogism a form absolutely independent. It is even more probable that he assimilated it to the Deductive, since he appears to prescribe a conversion of the minor premise, in order to legitimate the universal conclusion, (An. Pr. II. 23, § 4.); this in effect is to transform it into a syllogism of the first figure (in *Barbara*). It is even this passage which may have seduced subsequent logicians, admitting as it does, however, of a different interpretation."

Aristotle, in expressing the extremes vaguely, as "*the one*" and "*the other*," is more accurate than the logicians, who ascribe the reciprocating proposition to the *minor* premise. For his example is only of a single case. On the doctrine, indeed, of a quantified predicate, the reciprocation may be, in *either* premise, or in *both*.]

processes, by reducing the Inductive syllogism to the schematic proprieties of the Deductive,—proceeding as they do on a total misconception of their analogy and differences, have contributed to involve the doctrine of Logical Induction in a cloud of error and confusion. The Inductive inference is equally independent, and, though far less complex, equally worthy of analysis as the Deductive; it is governed by its own laws; and, if judged aright, must be estimated by its own standard. The correlation of the two processes is best exemplified by employing the same symbols in our ascent through an Inductive, and our re-descent through a Deductive syllogism.

<i>Inductive.</i>	<i>Deductive.</i>
x, y, z are A;	B is A;
x, y, z are (whole) B;	x, y, z are (under) B;
Therefore, B is A.	Therefore, x, y, z are A.
<i>or</i>	<i>or</i>
A contains x, y, z;	A contains B;
x, y, z constitute B;	B contains x, y, z;
Therefore, A contains B.	Therefore, A contains x, y, z.

These two syllogisms exhibit, each in its kind, the one natural and perfect figure. This will be at once admitted of the Deductive, which is in the first. But the Inductive, estimated, as it has always been, by the standard of the Deductive, will appear a monster. It appears, on that standard, only in the third figure; *

* We say—Induction *appears* a syllogism of the third figure, because, though so held by logicians, it is not. [?] The mistake arose from the ambiguity of the copula or substantive verb, which in different relations expresses either “are contained under,” or “constitute.” Thus, taking Aristotle’s example:—

Man, horse, mule, are long-lived;

Man, horse, mule, are the *whole* class of animals wanting bile;

Therefore, the whole class of animals wanting bile are long-lived.

Now here it is evident that the subject stands in a very different relation to its predicate in the major and in the minor premise; though in both cases the connexion is expressed by the same copula. In the former, the “are” expresses that *the predicate determines the subject as a contained part*; in the latter, that *the subject determines the predicate by constituting it a whole*. Explicitly thus:

Long-lived—contains—Man, horse, mule;

Man, horse, mule,—constitute—Animal wanting bile;

Therefore, Long-lived—contains—Animal wanting bile.

That the logicians have neglected to analyze the Inductive inference as an independent process, and attempted to reduce it to the conditions of the Deductive; is the cause or the effect of a primary deficiency in their technical

and then contrary to the rule of that figure it has an universal conclusion.* (Analyt. Pr. i. 22, § 8). But when we look less par-

language. They have no word to express the *synthesis of a logical whole*. The word *constitute*, &c., which we have, from necessity, employed in this sense, belongs properly to the relations of an *Essential* (Physical or Metaphysical) whole, and parts. [I would now express this, and what follows, somewhat differently; though not varying in the doctrine itself.]

* [It will be seen from the tenor of the text, that by the year 1833, I had become aware of the error in the doctrine of Aristotle and the logicians, which maintains that *the predicate in affirmative propositions could only be formally quantified as particular*; nay, that Aristotle, by his practice in the inductive syllogism, virtually contradicts the speculative precept which he, over and over, expressly enounces for syllogism in general. It was not, however, for several years thereafter, that I made the second step; *by admitting in negative propositions a particular predicate*. The doctrine of a thoroughgoing quantification of the predicate, with its results, I have, however, publicly taught since the year 1840, at the latest. How this doctrine, when applied, at once simplifies and amplifies the logic of propositions and of syllogisms, it is not here requisite to state. (But see Appendix II.) I would only remark, in reference to certain recent misapprehensions, that my doctrine has, and could have, no novelty from a mere recognition, as possible, of the eight propositional forms,—four affirmative and four negative;—forms, which I thus name and number:—

	<i>Affirmative.</i>	<i>Negative.</i>
i. <i>Toto-total</i> .	All—is all — .	Any—is not any— .
ii. <i>Toto-partial</i> .	All—is some — .	Any—is not some— .
iii. <i>Parti-total</i> .	Some—is all — .	Some—is not any— .
iv. <i>Parti-partial</i> .	Some—is some — .	Some—is not some— .

Every system of logic necessarily contemplated *all* these; for of these every system of the science expressly allowed some, and expressly disallowed the others. By Aristotle and logicians in general, of the *Affirmative* the *even*, of the *Negative* the *odd*, numbers are declared admissible, whilst the others are overtly rejected:—formally, at least, and of necessity; for though a universal quantification of the predicate in affirmatives has been frequently recognised, this was by logicians recognised, (if not ignorantly,) as *vi materiae*, contingently, and therefore extralogically; nor am I aware of any previous attempt to prove, that, *formally* or by the laws of thought, even this proposition had a right to claim its place in logic. It is not, therefore, on a mere enumeration of the eight propositional forms,—far less is it on an ignorance of the ordinary objection by logicians,—on a mistake of the meaning of the forms themselves,—and on a blindness to the results of a thoroughgoing quantification of the predicate, that I would found any claim of novelty to my New Analytic. Yet on this ground it has been actually contested!—In general, I may say, that aware of many partial manifestations of discontent with the common doctrine, I know of no attempt to evince that the doctrine itself is radically wrong. Various of these manifestations are recorded by Mr Baynes in his excellent "Essay on the new Analytic of Logical Forms."

tially and more profoundly into the matter, our conclusion will be very different.

In the *first* place, we find that the two syllogisms present so systematic a relation of contrast and similarity, that, the perfection of the one being admitted, we are analogically led to presume the perfection of the other. In the *propositions*, the order of the terms remains unchanged: but the order of the propositions themselves is reversed; the conclusion of the one syllogism form-

The thoroughgoing quantification of the predicate, in its appliance to negative propositions, has been demurred to by logicians well entitled to respect, who do not gainsay it in the case of affirmatives. But not only is this application allowable, not only is it systematic, not only is it useful,—it is even necessary.—For, to speak even of its very weakest form, that of partial negation, "*Some—is not some—*"; this (to say nothing of its other uses) is the form, and the only form, which we naturally employ in dividing a whole of any kind into parts:—"Some *A* is not some *A*." And is this form (that too inconsistently) to be excluded from logic—exempted from demand?—But, again, to prove *both* the obnoxious propositions summarily, and at once:—what objection, apart from the arbitrary laws of our present logics, can be taken to the following syllogism?—

All man is some animal;
Any man is not (no man is) some animal;
Therefore, some animal is not some animal."

Vary this syllogism of the third, to any other figure; it will always be legitimate by nature, if illegitimate to unnatural art. Taking it, however, as it is:—The negative minor, with its particular predicate, offends logical prejudice. But it is a propositional form irreducible, both as true in itself, and as necessary in practice.—Its converse, again, is even technically allowed; and no proposition can possibly be right, if its converse is possibly wrong. For, to say, (as has been said, indeed, from Aristotle downwards,) that a partial negative proposition is inconvertible; this is merely to confess, that the rules of the logicians are inadequate to the truth of logic and the realities of nature. In fact, it is to supply this very inadequacy, that the doctrine of a thoroughgoing quantification of the predicate is, perhaps, mainly required. A total negative cannot, therefore, be scientifically refused.—But if the premises of a syllogism be correct, its conclusion must be obligatory. This conclusion, however, is a partial negative:—

"Some animal (say, rational) is not some animal (say, irrational)."

A partial negative is thus a proposition, not only logically valid, but logically indispensable.

Nothing, it may be observed, is more easy than to misapply a form; nothing is more easy than to employ a weaker, when we are entitled to employ a stronger proposition. But from the special and factitious absurdity, thus emerging, to infer the general and natural absurdity of a propositional form,—this, certainly, is not a logical procedure.—(In part, coincident with what I have elsewhere, and that this very day, been obliged to state.)]

ing the major premise of the other. Of the *terms*, the major is common to both; but (as noticed by Aristotle) the middle term of the one is the minor of the other. In the common minor premise, the terms, though identical, have, with the different nature of the process, changed their relation in thought. In the Inductive, the parts being conceived as constituting the whole, are the determining notion; whereas, in the Deductive, the parts being conceived as contained under the whole, are the determined.

But, in the *second* place, however apparently dissimilar in figure and proportion may be the two syllogisms on this partial standard, it will be found, if we ascend to a higher, that a common general principle regulates a similar, nay, a one exclusive perfection in each. The perfection of figure in *all* syllogisms is this:—*That the Middle-term should be the determined notion in the Proposition, the determining notion in the Assumption.*—This condition is realized in the first figure of the Deductive syllogism. There, the middle term is the subject (contained, determined notion,) in the proposition or major premise; and the predicate (containing, determining notion,) in the minor premise or assumption.—In like manner, in our Inductive Syllogism, the middle term is the subject (contained, determined notion,) of the proposition, and the constituent (determining notion) of the assumption. Thus, not only are the Inductive and Deductive syllogisms, in a general sense, reversed processes; the perfect figure of the one is the exact evolution or involution of the perfect figure of the other.—The same analogy holds with their imperfections. Taking, for example, what logicians have in general given as the perfected figure, but which is, in fact, an unnatural perversion of the Inductive syllogism, (*i. e.* its reduction to the first figure, by converting the terms of the minor premise,) we shall find, that its reversal into a Deductive syllogism affords, as we should have anticipated, only a kindred imperfection (in the third figure.)

<i>Inductive.</i>	<i>Deductive.</i>
x, y, z are A;	B is A;
B is x, y, z;	B is x, y, z;
Therefore, B is A.	Therefore, x, y, z are A.
<i>or</i>	<i>or</i>
A contains x, y, z;	A contains B;
x, y, z contain B:	x, y, z contain B;
Therefore, A contains B.	Therefore, A contains x, y, z.

We call this reduction of the Inductive syllogism an *unnatural perversion*; because, in the converted minor premise, the constituent parts are perverted into a containing whole, and the containing whole into a subject, contained under its constituent parts.

After these hints of what we deem the true nature of logical Induction, we return to Dr Whately; whose account of this process is given principally in the two following passages.

The *first*:—"Logic takes no cognisance of *Induction*, for instance, or of a *priori* reasoning, &c., as distinct *forms* of argument; for when thrown into the syllogistic form, and when letters of the alphabet are substituted for the terms, (and it is thus that an argument is properly to be brought under the cognisance of logic,) there is no distinction between them:—*e. g.* a 'Property which belongs to the ox, sheep, deer, goat, and antelope, belongs to all horned animals; rumination belongs to these; therefore to all.' This, which is an inductive argument, is evidently a syllogism in Barbara. The essence of an inductive argument (and so of the other kinds which are distinguished from it) consists not in the *form of the argument*, but in the relation which the *subject-matter* of the premisses bears to that of the conclusion." (P. 110.) —The *second*:—"In the process of reasoning by which we deduce, from our observation of certain known cases, an inference with respect to unknown ones, we are employing a syllogism in Barbara with the major premiss suppressed; that being always substantially the same, as it asserts, that, 'what belongs to the individual or individuals we have examined, belongs to the whole class under which they come.'" (P. 216.)

This agrees, neither with the Aristotelic doctrine, nor with truth.

We must presume, from his silence, that our author, in his analysis of the inductive process, was not aware of any essential deviation from the doctrine of Aristotle. This he does not seem to have studied, either in the *Organon*, or in any of its authentic expositors; and nothing can be conceived more contradictory, than the statements of the philosopher on this subject and those of Dr Whately.—Aristotle views the Inductive and the Deductive syllogisms as, in certain respects, similar in form; in others, as diametrically *opposed*. Dr Whately regards them as *formally identical*, and only discriminated by a material difference, *i. e.* logically considered, by no difference at all.—Aristotle regards the Deductive syllogism as the analysis of a logical whole into its parts,—as a *descent* from the (more) general to the (more) particular; the Inductive as a synthesis of logical parts into a logical whole,—as an *ascent* from the (more) particular to the (more) general. Dr Whately, on the other hand, virtually *annihilates the latter pro-*

cess, and identifies the Inductive with the Deductive inference.—Aristotle makes Deduction necessarily *dependent* on Induction; he maintains that the highest or most universal axioms which constitute the primary and immediate propositions of the former, are all conclusions previously furnished by the latter. Whately, on the contrary, implicitly asserts the *independence* of the syllogism proper, as he considers the conclusions of Induction to be only inferences evolved from a more universal major.—Aristotle recognises only a *perfect* Induction, *i. e.* an enumeration (actual or presumed) of *all* the parts; Whately only an *imperfect*, *i. e.* an enumeration professedly only of *some*.—To Aristotle, Induction is a syllogism, *apparently*, of the *third figure*; to Whately, it is a syllogism of the *first*. In short, if Whately be right, Aristotle is fundamentally wrong: wrong in admitting Inductive reasoning within the sphere of logic at all; wrong in discriminating Induction from Syllogism proper; wrong in all the particulars of the contrast.

But that the Philosopher is not in error, is evident at once; whereas the Archbishop's doctrine is palpably suicidal. On that doctrine, the *inductive* reasoning is "a syllogism in *Barbara*, the *major* premiss being always substantially the same:—*What belongs to the individual or individuals we have examined, belongs to the whole class under which they come.*"

Now, we ask:—In what manner do we obtain *this major*, in the evolution of which all Induction consists? Here there are only *four* possible answers.—1°, This proposition, (like the *dictum de omni et de nullo*, and the *axiom of the convertibility of the whole and its parts*,) it may be said is (analytically) *self-evident*, its negation implying a contradiction. This answer is manifestly false. For so far from being necessitated by the laws of thought, it is in opposition to them; the *whole* of the consequent not being determined in thought by the *some* of the antecedent.—2°, It may be said, to be *acquired by Induction*. This, however, would be absurd; inasmuch as Induction itself is, *ex hypothesi*, only possible, through and after the principle it is thus adduced to construct. This of the proposition as a whole. The same is also true of its parts. "*Class*" is a notion, itself the result of an Induction; it cannot, therefore, be postulated as a pre-requisite or element of that process itself. A similar remark applies to "*property*."—3°, It may be said to be *deduced from a higher axiom*. What then is such axiom? That has not been declared. And if such existed, the same questions would remain to be answered regard-

ing the higher proposition which are now required in relation to the lower.—4°, It may be asserted to be (as Kant would say, synthetically) *given as an ultimate principle of our intellectual constitution*. This will not do. In the *first* place, if such principle exist, it only inclines, it does not necessitate. In the *second*, by appealing to it, we should transcend our science, confound the logical and formal with the metaphysical and material. In the *third*, we should thus attempt to prove a logical law from a psychological observation; i. e. establish an *a priori*, a necessary science on a precarious experience,—an experience admitted perhaps by the disciples of Reid and Royer-Collard, but scouted by those of Gassendi and Locke.*

Logicians, we already observed, have been guilty of a fundamental error, in bringing the distinction of *perfect* and of *imperfect* Induction within the sphere of their science, as this distinction proceeds on a material, consequently on an extralogical, difference. In this error, however, Dr Whately exceeds all other logicians, recognising, as he does, exclusively, that Induction, which is only precariously valid, and valid only through an extralogical presumption. This common major premise, if stated as necessary, is (formally and materially) false; if stated as probable, it is (formally) illegitimate, even if not (materially) untrue, both because an inferior degree of certainty is incompatible with an apodictic science, and because the amount of certainty itself must, if not capriciously assumed, be borrowed from evidence dependent on material conditions beyond the purview of a formal science.

Dr Whately is not less unfortunate in refuting the opinions of other logicians touching Induction, than in establishing his own.

"In this process," he says, "we are employing a syllogism in Barbara with the *major* premiss suppressed; not the *minor*, as Aldrich represents it. The instance he gives will sufficiently prove this:—'This and that, and the other magnet, attract iron; therefore so do all.' If this were, as he asserts, an enthymeme whose *minor* is suppressed, the only premise which we could supply to fill it up would be, 'all magnets are this, that, and the other;' which is manifestly false." (P. 217.)

* "It is by *induction* that all axioms are known, such as:—'Things that are equal to the same are equal to one another;' 'A whole is greater than its parts;' and all other mathematical axioms." Huyshe, p. 132. The same doctrine is held by Hill, p. 176.—Is such the *Oxford Metaphysic*? [This doctrine, the ingenious author of "The Regeneration of Metaphysics" (pp. 81, 104), charges also on Dr Whately.]

Aldrich has faults sufficient of his own, without taking burden of the sins of others. He is here singly reprehended for saying only what, his critic seems not aware, had been said by all logicians before him. The suppressed *minor* premise even obtained in the schools the name of the *Constantia*; and it was not until the time of Wolf* that a new-fangled doctrine, in this respect the same as Whately's, in some degree superseded the older and correcter theory. "In the example of Aldrich," says our author, "the suppressed minor premiss, 'all magnets are this, that, and the other,' is manifestly false." Why?—Is it because the proposition affirms that a certain three magnets ("this, that, and the other") are all magnets? Even admitting this, the objection is null. The logician has a perfect right to suppose this or any other *material* falsity for an example; all that is required of him is, that his syllogism should be *formally* correct. Logic only proves on the *hypothetical* truth of its antecedents. As Magentinus notices, Aristotle's example of Induction is physiologically false; but it is not on that account a whit the worse as a dialectical illustration. The objection is wholly extralogical.—But this is not, in fact, the meaning of the proposition. The words (in the original "hic, et ille, et iste magnes") are intended to denote *every* several magnet. Aldrich borrows the instance from Sanderson, by whom it is also more fully expressed:—"Iste magnes trahit ferrum, et ille, et hic, et *pariter se habet in reliquis*," &c.—Perhaps, however, and this is the only other alternative, Dr Whately thinks the assumption "manifestly false," on the ground that no extent of observation could possibly be commensurate with "all magnets." This objection likewise lies beyond the domain of the science. The logician, *qua* logician, knows nothing of material possibility and impossibility. To him all is possible that does not involve a contradiction in terms. At the same time, the present is merely the logical manner of wording the proposition. The physical observer asserts on the analogy of his science, "This, that, the other magnet, &c., *represent*, all magnets;" which the logician *accepting*, brings under the conditions, and translates into the language of his—"This, that, the other mag-

* [I said generally "*the time of Wolf*;" for I recollected that some German logicians, prior to him, had held the same doctrine. It was however Wolf's authority which rendered the innovation general.—M. Peisse has here the following note:—"The germ of this doctrine is to be found in Gas-sendi. (Inst. Log. Pars iii. canon 11. Opera, i. 113.)"]

net, &c. are all magnets," i. e. are conceived as constituting the whole—Magnet.

Dr Whately's errors relative to Induction are, however, surpassed by those of another able writer, Mr Hampden, in regard both to that process itself, and to the Aristotelic exposition of its nature;—errors the more inconceivable, as he professes to have devoted peculiar attention to the subject, which he says, "deserves a more particular notice, as throwing light on Aristotle's whole method of philosophising, while it shows how far he approximated to the induction of modern philosophy." His words are:—

"To obtain an accurate notion of the being of anything, we require a definition of it. A definition of the thing corresponds, in dialectic, with the essential notion of it in metaphysics. This abstract notion, then, according to Aristotle, constituting the true scientific view of a thing—and all the real knowledge consequently of the properties of the thing depending on the right limitation of this notion—some exact method of arriving at definitions which should express these limitations, and serve as the principles of sciences, became indispensable in such a system of philosophy. But in order to attain such definitions, a process of induction was required,—not merely an induction of that kind, which is only a peculiar form of syllogism, enumerating all the individuals implied in a class instead of the whole class collectively, but an induction of a philosophical character, and only differing from the induction of modern philosophy so far as it is employed about language. We shall endeavour to show this more fully. There are, then, two kinds of induction treated of by Aristotle. The first, that of simple enumeration."—(After explaining with ordinary accuracy the *first*, in fact the *only*, species of induction, he proceeds:—)"But there is also a higher kind of induction employed by Aristotle, and pointed out by him expressly in its subserviency to the exact notions of things, by its leading to the right definitions of them in words. As it appears that words, in a dialectical point of view, are classes more or less comprehensive of observations on things, it is evident that we must gradually approximate towards a definition of any individual notion, by assigning class within class, until we have narrowed the extent of the expression as far as language will admit. (Analyt. Post. ii. c. 13, § 21.) The first definitions of any object are vague, founded on some obvious resemblance which it exhibits compared with other objects. This point of resemblance we abstract in thought, and it becomes, when expressed in language, a genus or class, under which we regard the object as included. A more attentive examination suggests to us less obvious points of resemblance between this object and some of those with which we had classed it before. Thus carrying on the analysis—and by the power of abstraction giving an independent existence to those successive points of resemblance—we obtain subaltern genera or species, or subordinate classes included in that original class with which the process of abstraction commenced. As these several classifications are relative to each

other, and dependent on the class with which we first commenced, the definition of any notion requires a successive enumeration of the several classes in the line of abstraction, and hence is said technically to consist of genus and differentia; the genus being the first abstraction, or class to which the object is first referred, and the differentia being the subordinate classes in the same line of abstraction. Now, the process by which we discover these successive genera, is strictly one of philosophical induction. As in the philosophy of nature in general, we take certain facts as the basis of enquiry, and proceed by rejection and exclusion of principles involved in the enquiry, until at last—there appearing no ground for further rejection—we conclude that we are in possession of the true principle of the object examined; so, in the philosophy of language, we must proceed by a like rejection and exclusion of notions implied in the general term with which we set out, until we reach the very confines of that notion of it with which our enquiry is concerned. This exclusion is effected in language, by annexing to the general term denoting the class to which the object is primarily referred, other terms not including under them those other objects or notions to which the general term applies. For thus, whilst each successive term in the definition, in itself, extends to more than the object so defined,—yet all viewed together do not; and this their relative bearing on the one point constitutes the being of the things. This is thus illustrated by Aristotle:—‘If we are enquiring,’ he says, ‘what magnanimity is, we must consider the instances of certain magnanimous persons whom we know, what one thing they all have so far forth as they are such; as, if Alcibiades was magnanimous, or Achilles, or Ajax;—what one thing they all have; say, *impatience under insult*; for one made war, another raged, the other slew himself. Again, in the instances of others, as of Lysander or Socrates—if here it is, *to be unaltered by prosperity or adversity*;—taking these two cases, I consider, what this *apathy in regard to events*, and *impatience under insult*, have the same in them. If, now, they have nothing the same, there must be two species of magnanimity.’” (P. 513.)

Mr Hampden afterwards states, *inter alia*, that the induction of Aristotle, “having for its object to determine accurately in words the notion of the being of things, proceeds, according to the nature of language, from the general, and ends in the particular; whereas the investigation of a law of nature proceeds from the particular, and ends in the general. Dialectical induction is synthetical, whilst philosophical induction is analytical in the result.” On this ground, he explains the meaning of the term (*ἐπαγωγή*), and defends the Induction of Aristotle against its disparagement by Lord Bacon.

We had imagined, that every compend of logic explained the *two grand methods of Investigating the Definition*; but upon looking into the Oxford treatises on this science, we were surprised to find, that this, among other important matters, had in all of

them been overlooked. This may, in part, enable us to surmise, how Mr Hampden could have so misconceived so elementary a point, as to have actually reversed the doctrine, not only of Aristotle, but of all other philosophers. A few words will be sufficient to illustrate the nature of the error.

In the thirteenth chapter (Pacian division) of the second book of the *Posterior Analytics*, Aristotle treats of the manner of hunting out, as he terms it, the essential nature (*τὸ τί ἦεναι, quidditas*) of a thing, the enunciation of which nature constitutes its definition. This may be attempted in *two contrary ways*.—By the *one*, we may descend from the category, or higher genus of the thing to be defined, dividing and subdividing, through the opposite differences, till we reach the genus under which it is proximately contained; and this last genus, along with the specific difference by which the genus is divided, will be the definition required.—By the *other*, we may ascend from the singulars, contained under the thing to be defined, (which is necessarily an universal,) by an exclusion of their differences, until we attain an attribution common to them all, which attribution will supply the definition sought.—The *former* of these is, after Plato, called by Aristotle, and logicians in general, the method of *Division*; the higher genus being regarded as the (universal) *whole*, the subaltern genera and species as the (subject) *parts* into which it is divided. The *extension* here determines the totality.—The *latter*, which is described but not named by Aristotle, is variously denominated by his followers. Some, as his Greek commentators, taking the totality as determined by the *comprehension*, view the singulars as so many (essential) wholes, of which the common attribute or definition is a part, and accordingly call this mode of hunting up the essence the *Analytic*; others again, regarding the genus as the whole, the species and individuals as the parts, style it the *Compositive*, or *Synthetic*, or *Collective*:* while others, in fine,

* “*In one respect*,” says Aristotle, “*the Genus is called a part of the Species; in another, the Species a part of the Genus.*” (Metaph. L. v. c. 25, t. 30. Compare Phys. L. iv. c. 5 (3) t. 23; and Porph. Intr. c. 3, § 39.) In like manner, the *same method*, viewed in different relations, may be styled either *Analysis* or *Synthesis*. This, however, has not been acknowledged; nor has it even attracted notice, that different logicians and philosophers, though severally applying the terms only in a single sense, are still at cross purposes with each other. One calls *Synthesis* what another calls *Analysis*,—one calls *Progression* what another calls *Regression*; and this both

looking simply to the order of the process itself, from the individual to the general, name it the *Inductive*. These last we shall imitate.

Now, in the chapter referred to, Aristotle considers and contrasts these two methods.—In regard to *Division* (§ 8—20) he shows on the one hand, (against Plato, who is not named,) that this process is not to be viewed as having any power of demonstration or argument; * and on the other (against Speusippus, as we learn from Eudemus, through the Greek expositors), that it is not wholly to be rejected as worthless, being useful, in subservience always to the other method of induction, to ensure,—that none of the essential qualities are omitted,—that these qualities alone are taken,—and that they are properly subordinated and arranged.—In reference to the *Inductive* method, which is to be considered as the principal, he explains its nature, and delivers various precepts for its due application. (§ 7, 21, etc.)

This summary will enable the reader to understand Mr Hampden's perversion of Aristotle's doctrine.—In the *first* place: that gentleman is mistaken, in supposing that the philosopher applies the term Induction to any method of investigating the definition discussed by him in the chapter in question. The word does not once occur.—In the *second* place: he is still farther deceived, in thinking that Aristotle there bestows that name on a descent from the universal to the particular; whereas in his philosophy—indeed in all philosophies—it exclusively pertains to an ascent from the particular to the universal.—In the *third* place: he is wrong, in imagining that Aristotle there treats only of a single method, for he considers and contrasts two methods, not only different, but opposed.†—In the *fourth* place: he is mistaken, in understanding,

in ancient and modern times. We ourselves think it best to regulate the use of these terms by reference to the notion of a whole and parts, of *any* kind. This we do, and do professedly. Mr Hampden, but probably without intending it, does the same: in one part of the passage we have quoted, speaking of Division, (his logical induction,) as an "analysis;" in another, describing it as "synthetical." [The total omission of the distinction of *Comprehension* and *Extension* (though this be the very turning point of logic), by former Oxford logicians, is remarkable in itself, and has been the cause, as is here exemplified, of much error and confusion. Dr Whately, indeed, not only overlooks the distinction, but he often reverses the language in which it is logically expressed.]

* This he had elsewhere done; Pr. Analyt. I. i. c. 31 Post. Analyt. I. ii., c. 5, et alibi.

† Mr Hampden's error, we suspect, originates in the circumstance that Pacius (whom Duval follows in the Organon) speaks, in his analytic argu-

as applied to one contrary, the observations which Aristotle applies, and which are only applicable, in expounding the reverse. For example: he quotes in the note, as pertinent to Division, words of the original relative to Induction; and the instance (from the definition of Magnanimity) adduced to elucidate the one method, is in reality employed by Aristotle to explain the other.—In the *fifth* place: his error is enhanced, by seeing in his own single method the subordinate of Aristotle's two; and in lauding, as a peculiarly important part of the Aristotelic philosophy, a process in the exposition of which Aristotle has no claim to originality, and to which he himself, here and elsewhere, justly attributes only an inferior importance.—In the *sixth* place: in contradiction equally of his whole philosophy and of the truth of nature, the Stagirite is made to hold that our highest abstractions are first in the order of time; that our process of classification is encentric, not eccentric; that a child generalizes *substance* and *accident* before *egg* and *white*.

Mr Hampden's statement of the Inductive method being thus the reverse of truth, it is needless to say that the etymological explanation he has hazarded of the term (*ιταγνν*) must be erroneous.—But even more erroneous is the pendant by which he attempts to illustrate his interpretation of that term. "The *απαγωγη*, Abduction spoken of by Aristotle, (*Anal. Prior.* ii. c. 25,) is just the reverse,—a leading away, by the terms successively brought from the more accurate notion conveyed by a former one." The *Abduction*, here referred to, is no more such a "leading away"—than it is a theft. It is a kind of syllogism—of what nature we cannot longer trespass on the patience of our readers by explaining. For the same reason we say nothing of some other errors we had remarked in Mr Hampden's account of that branch of the Aristotelic philosophy which we have been now considering.

ment of the chapter, of a *methodus divisiva* and a *methodus inductiva*; and that Mr Hampden, using Duval's edition, in his extemporaneous study of the subject, not previously aware that there are two opposite methods of investigating the definition, took up the notion that these were merely a two-fold expression for the same thing. Mr Hampden is an able man: but to understand Aristotle in any of his works, he must be understood in all; and to be understood in all, he must be long and patiently studied by a mind disciplined to speculation, and familiar with the literature of philosophy.

V.—DEAF AND DUMB.

HISTORY OF THEIR INSTRUCTION, IN REFERENCE TO DALGARNO.

(JULY, 1835.)

The Works of GEORGE DALGARNO, of Aberdeen, 4to. Reprinted
at Edinburgh : 1834.

IN taking up this work, we owe perhaps some apology for the deviation from our ordinary rules; inasmuch as it is merely a reprint of ancient matter, the publication also not professedly reaching beyond the sphere of a private society,—the *Maitland Club*. We are induced, however, to make a qualified exception in favour of this edition of Dalgarno's Works, in consideration of the extreme rarity of the original treatises, added to their high importance; and because the liberality of the editors, (Mr Henry Cockburn and Mr Thomas Maitland), has not limited their contribution merely to members of that society, but extended it to the principal libraries of the kingdom, and, we believe, to many individuals likely to feel an interest in its contents. We shall, however, relax our rule only to the measure of a very brief notice.

Dalgarno's Works are composed of *two* treatises: the first entitled—" *Ars Signorum, Vulgo Character Universalis et Lingua Philosophica. Londini: 1661;*" the second—" *Didascalocophus, or the Deaf and Dumb Man's Tutor; to which is added a Discourse of the Nature and Number of Double Consonants: both which Tracts being the first (for what the Author knows) that have been published upon either of the subjects. Printed at the Theater in Oxford, 1680.*"

Of the author himself, all that is now known is comprised in

the following slight notice by Anthony a Wood. "The reader may be pleased to know, that one George Dalgarno, a Scot, wrote a book entitled, *Ars Signorum*, &c., London, 1661. This book, before it went to press, the author communicated to Dr Wilkins, who, from thence taking a hint of greater matter, carried it on, and brought it up to that which you see extant. This Dalgarno was born at Old Aberdeen, and bred in the University at New Aberdeen; taught a private grammar school, with good success, for about thirty years together, in the parishes of S. Michael, and S. Mary Mag., in Oxford; wrote also *Didascalocophus, or the Deaf and Dumb Man's Tutor*; and dying of a fever, on the 28th of August, 1687, aged sixty or more, was buried in the north body of the church of S. Mary Magdalen." (Athenæ Oxon., Vol. II., p. 506.) With the exception of an accidental allusion to his treatise on Signs, by Leibnitz, in a letter to Mr Burnet of Kemney, from whom he had probably received that work of a fellow Aberdonian, and some slight traditionary statements by the German historians of literature, the memory of Dalgarno had wholly perished, when attention was again awakened to the originality and importance of his speculations by the late Mr Dugald Stewart, in various passages of his writings; and these having suggested to the editors the idea of the present reprint, they are very properly collected in their preliminary statement, as the best of testimonies to its importance.

In speaking of Dalgarno's two treatises, we shall reverse their chronological as well as natural order, and take them in what appears to us the order of their practical interest.

To appreciate the high and peculiar value of our author's treatise on the education of the Deaf and Dumb, it is necessary to take a survey of what had actually been accomplished in this important department of applied psychology, previous to the appearance of his treatise. A regular history of this branch of education, with extracts from the writings of its earlier promoters, now in general extremely rare, would form an interesting present, both to the speculative and to the practical philosopher. In the total absence of such a work, we may be pardoned in throwing briefly together a few scattered notices, which have accidentally crossed us in the course of other inquiries.

In deducing a history of the progress in the art of educating the Deaf and Dumb, there are certain separate points of accomplishment which it is proper to distinguish. These are: 1°. The

teaching the pupil to understand, by the motions of the lips, &c., the speech of those around him; 2°, To communicate his own thoughts in the articulate sounds of a language; 3°, To read writing; 4°, To employ letters and words, denoted by certain conventional motions of the hand. 5°, There is, however, a *fifth* point, of still higher and more difficult accomplishment, and on which the easy, certain, and complete success of the whole attempt depends;—that is, a determination of the psychological and physiological laws, by which the order and objects of instruction, under the condition of deafness, is regulated.

As the result of a philosophical deduction, it was naturally to be expected, that the last of these should only be realised, after the possibility and conditions of the method in general had been empirically proved in the other four. In the present instance, however, theory did not merely, follow practice,—it long prevented its application; and the deaf and dumb had been actually taught the use of speech, before the philosophers would admit their capacity of instruction. The dictum of Aristotle, that of all the senses, hearing contributes the most to intelligence and knowledge (“*αἰς φρονήσει πλείστην*”), was taken, apart from the qualifications under which that illustrious thinker advanced the proposition; (viz. that this was only *by accident*, inasmuch as hearing is the mere senso of sound, and sound contingently the vehicle of thought): and was alleged to prove, what was in fact the very converse of its true import, that the deaf are wholly incapable of intellectual instruction.

In like manner, a dogma of the physicians, which remounts we believe to Galen, that dumbness was not, as Aristotle had affirmed, in general a mere consequent of deafness, but the effect of a common organic lesion of the lingual and auditory nerves, arising as they do from a neighbouring origin in the brain,—was generally admitted as conclusive against the possibility of a deaf person being taught to articulate sounds. It was, therefore, with great wonder and doubt, that the first examples of the falsehood of these assumptions were received by the learned. The disabilities which the Roman law, and the older codes of every European jurisprudence, imposed on the deaf and dumb, were all founded in the principle,—“*Surdus natus, mutus est et plane indisciplinabilis*,” as the great French jurist, Molinæus expresses it.

Rodolphus Agricola, who died in 1485, is the oldest testimony we recollect to a capacity in the deaf and dumb of an intelligent

education; and it is remarkable, that there is none older. In the last chapter of his posthumous work, "*De Inventione Dialectica*," as an illustration of "the immense and almost incredible power of the human mind," he instances "as little less than miraculous, what he himself had witnessed,—a person deaf from infancy, and consequently dumb, who had learned to understand writing, and, as if possessed of speech, was able to write down his whole thoughts."—Ludovicus Vives, some fifty years later, in his treatise "*De Anima*" (L. ii. c. *De Discendi ratione*), after noticing that Aristotle had justly styled the ear the organ of instruction, expresses his "wonder that there should have been a person born deaf and dumb who had learned letters: let the belief in this, rest with Rodolphus Agricola, who has recorded the fact, and affirmed that he himself beheld it." The countrymen of the unbelieving Vives were, however, destined, in the following generation, to be the inventors of the art in question. For—

The oldest indication we have, of any systematic attempt at educating the deaf, is by Franciscus Vallesius, the celebrated Spanish physician, who, in his "*Philosophia Sacra*," published in 1590, mentions that "a friend of his, *Petrus Pontius*, a Benedictine monk, taught the deaf to speak by no other art than instructing them first to write, then pointing out to them the objects signified by the written characters, and finally guiding them to those motions of the tongue, &c., which correspond to the characters." What more is now accomplished? *Petrus Pontius*—who was a Spaniard, and not to be confounded with the celebrated Scotist, *Joannes Poucius*, Minorite, and native of Ireland—did not publish an account of his method. This, however, was done by John Paul Bonnet, of Arragon, secretary to the Constable of Castile, who, in 1620, printed, in Spanish, at Madrid, his "*Reduction of Letters, and Art of Instructing the Dumb*." That this work of Bonnet contains only the practice of Pontius, is proved by the evidence of Perez in the book itself, and by that of Antonius in his *Bibliotheca Hispanica*. Of the signal success of the art in the hands of Pontius, (among others on two brothers and a sister of the Constable of Castile,) we have accounts by Antonius, by Morales; and a very curious one by Sir Kenelm Digby, of what he himself saw in the younger brother of the Constable, when he accompanied Charles I., when Prince of Wales, in his expedition into Spain, and to whom he appeals as a fellow-witness with himself.

"There was a nobleman of great quality that I knew in Spain, the younger brother of the Constable of Castile, who was taught to *heare* the sounds of *words* with his *eyes* (if that expression may be permitted). This Spanish Lord was born deafe, so deafe that if a gun were shot off close by his eare he could not heare it, and consequently he was dunbe; for not being able to heare the sound of words, he could never imitate nor understand them: The lovelinesse of his face, and especially the exceeding life and spiritfulness of his eyes, and the comelinesse of his person, and the whole composure of his body throughout, were pregnant signes of a well-tempered mind within. And therefore all that knew him lamented much the want of meanes to cultivate it, and to embrace it with the notions, which it seemed to be capable of, in regard of itself, had it not been crossed by this unhappy accident, which to remedie physicians and chyrurgions had long employed their skill, but all in vaine. At the last there was a priest, who undertooke the teaching him to understand others when they spoke, and to speake himselfe that others might understand him, for which attempt at first he was laughed at, yet after some yeares he was looked upon as if he had wrought a miracle. In a word, after strange patience, constancie and paines, he brought the yongg lord to speak as distinctly as any man whatsoever; and to understand so perfectly what others said, that he would not lose a word in a whole dayes conversation. I have often discoursed with the priest whilst I waited upon the Prince of Wales (now our gracious Sovereign) in Spain, and I doubt not but his Majesty remembreth all I have said of him, and much more: for his Majesty was very curious to observe, and enquire into the utmost of it. It is true, one great misbecomingnesse he was apt to fall into, whilst he spoke: which was an uncertainty in the tone of his voice, for not hearing the sound he made when he spoke, he could not steadily governe the pitch of his voyce, but it would be sometimes higher, and sometimes lower, though for the most part what he delivered together he ended in the same key as he began it. But when he had once snffered the passage of his voyce to close, at the opening it again, chance, or the measure of his earnestness to speak or reply, gave him his tone, which he was not capable of moderating by such an artifice, as is recorded Cains Græchus used, when passion in his orations to the people, drove out his voice with too great a vehemency or shrillnesse. He could discern in another whether he spoke shrill or low; and he would repeat after any bodie any hard word whatsoever, which the Prince tried often, not only in English, but by making some Welchmen that served his Highnesse speak words of their language, which he so perfectly echoed, that I confesse I wondered more at that than at all the rest, and his master himself would acknowledge that the rules of his art reached not to produce that effect with any certainty. And, therefore, concluded this in him must spring from other rules he had framed unto himselfe out of his owne attentive observation; which the advantages which nature had justly given him in the sharpnesse of senses to supply the want of this, endowed him with an ability and sagacity to do beyond any other man that had his hearing. He expressed it, surely, in a high measure by his so exact imitation of the Welch pronounciation; for that tongue (like the Hebrew) employeth much the guttural letters, and the motions of that part which frameth them cannot be seen or judged by the eye, otherwise than by the effect they may happily make by consent

in the other parts of the mouth exposed to view. For the knowledge he had of what they said sprung from his observing the motions they made, so that he could converse currently in the light, though they he talked with whispered never so softly. And I have seen him at the distance of a large chamber's breadth say words after one, that I standing close by the speaker could not hear a syllable of. But if he were in the darke, or if one turned his face out of his sight, he was capable of nothing one said."—(Treatise of Bodies.)

The prejudice was now dispelled, that the deaf and dumb were incapable of education; and during the course of the seventeenth century, many examples are recorded of their successful instruction, without even the aid of a teacher experienced in the art.

Though nothing can be clearer than the right of Spain to the original invention of this art in all its branches, we, however, find it claimed, at a much later period, and in the same year, (1670,) by *Lana*, the Italian Jesuit, in his "Prodromo;" and for *Dr John Wallis*, Professor of Geometry in Oxford, in the Transactions of the Royal Society of London. The precepts of the former are neither new nor important; and the latter can only vindicate his originality by an ignorance of what had previously been effected. Wallis appears to have long (that is, *before* the appearance of Dalgarno's work) applied himself mainly to the comparatively unimportant point of enabling the deaf to enunciate words. Without undervaluing the merit of his treatise on the nature and pronunciation of letters, in the introduction to his English Grammar, or the success of his principles in enabling the deaf to speak,—all this had been previously done by others with equal ability and success. The nature of letters, the organic modifications for the production of the various vocal sounds, had been investigated by *Fabricius ab Aquapendente* in his treatise "De Locutione;" and thereafter with remarkable accuracy and minuteness by *P. Montanus* in his "Account of a New Art called the Art of Speech," published in Holland many years prior to the grammar of Dr Wallis;—while *Bonnet*, in the work already mentioned, had, in the first book, treated "of the nature of letters and their pronunciation among different nations," and in the second, "showed how the mute may be taught the figure and pronunciation of letters by manual demonstration, and the motion of the mouth and lips."—Wallis's originality can indeed hardly be maintained in relation even to English writers.

To say nothing of *Lord Bacon's* recommendation of "the motions of the tongue, lips, throat, palate, &c., which go to the making up of the several letters, as a subject worthy of inquiry," *John Bulwer* had, in the year 1648, published his curious treatise

tise, entitled,—“Philosophus, or the Deafe and Dumbo Man's Friend, exhibiting the philosophical verity of that subtile art, which may enable one with an observant eie, to heare what any man speaks by the moving of his lips. Upon the same ground, with the advantage of an historical exemplification, apparently proving, that a man borne deafe and dumbe, may be taught to heare the sounds of words with his eie, and thence learn to speak with his tongue. By J. B. sirnamed the Chirosopher. London, 1648.”

Bulwer appears to have been ignorant of Bonnet's book, but he records many remarkable cases, several within his own experience, of what had been accomplished for the education of the deaf. He was the first also to recommend the institution of “an academy of the mute,” and to notice the capacity which deaf persons usually possess of enjoying music through the medium of the teeth—a fact which has latterly been turned to excellent account, especially in Germany; and there principally by *Father Robertson*, a monk of the Scots College of Ratisbon, by whose exertions a new source of instruction and enjoyment has thus been opened up to those otherwise insensible to sounds. It is remarkable that Bulwer, who had previously written a work on “*Chirolugia, or the Natural Language of the Hand*,” and who had thence even obtained the surname of the *Chirosopher*, should have suggested nothing in regard to a method of speaking on the fingers; and it is still more singular that his attention was not called to this device, as he himself has mentioned a remarkable case in which it had been actually applied. “A pregnant example,” he says, “of the officious nature of the touch, in supplying the defect or temporall incapacity of the other senses, we have in one Master Babington, of Burntwood, in the county of Essex, an ingenious gentleman, who, through some sicknesse, becoming deaf, doth, notwithstanding, feele words, and, as if he had an eye in his finger, sees signes in the darke; whose wife discourseth very perfectly with him by a strange way of arthrologie, or alphabet, contrived on the joynts of his fingers, who, taking him by the hand in the night, can so discourse with him very exactly; for he feeling the joynts which she toucheth for letters, by them collected into words, very readily conceives what she would suggest to him.” (P. 106.)

We pass over *Holder's* “*Elements of Speech. An Essay of Inquiry into the Natural Production of Letters, with an Appendix*

to instruct Persons Deaf and Dumb ;" and *Sibscote's* "Deaf and Dumb Man's Discourse," which were published in the interval between Wallis's practical application of his method and the appearance of Dalgarno's book. *Dalgarno*, we believe, may claim the merit of having first exhibited, and that in its most perfect form, a finger alphabet. He makes no pretensions, however, to the original conception of such a medium of communication. But the great and distinctive merit of his treatise is not so much, that it improved the mechanism of instruction, as that it corrected the errors of his predecessors, and pointed out the principles on which the art is founded, and by the observance of which alone it can be carried to perfection. As we first attempt to fix and communicate our notions by the aid of speech, it was a natural prejudice to believe that sounds were the necessary instrument of thought and its expression. The earlier instructors of the deaf and dumb were thus led to direct their principal effort to the teaching their pupils to distinguish the different mechanical movements by which different sounds are produced, and to imitate these sounds by imitating the organic modification on which they depend. They did not consider that still there existed no sound for the deaf; that the signs to which they thus attached ideas were only perceptions of sight and feeling; that these were, on the one hand, minute, ambiguous, fugitive, and, on the other, difficult; and that it would be better to associate thought with a system of signs more easy to produce, and less liable to be mistaken. The honour of first educating the deaf and dumb in the general principles of grammar, and in primarily associating their thought with written instead of with spoken symbols, is generally claimed for the eighteenth century, France, and the *Abbé de l'Epée*. All this was, however, fully demonstrated a century before in the forgotten treatise of our countryman, as in a great measure also practised by Pontius, the original inventor of the art, a century before Dalgarno. We are indebted, as we formerly observed, to Mr Dugald Stewart for rescuing the name of Dalgarno from the oblivion into which it had fallen; and the following quotation from that distinguished philosopher affords the most competent illustration of his merits:—

"After having thus paid the tribute of my sincere respect to the enlightened and benevolent exertions of a celebrated foreigner (Sicard), I feel myself called on to lay hold of the only opportunity that may occur to me of rescuing from oblivion the name of a Scottish writer, whose merits have been strangely overlooked, both by his contemporaries and by his successors.

The person I allude to is George Dalgarno, who, more than a hundred and thirty years ago, was led, by his own sagacity, to adopt, *a priori*, the same general conclusion concerning the education of the dumb, of which the experimental discovery, and the happy application, have, in our times, reflected such merited lustre on the name of Sicard. I mentioned Dalgarno formerly, in a note annexed to the first volume of the '*Philosophy of the Human Mind*,' as the author of a very ingenious tract, entitled '*Ars Signorum*,' from which it appears indisputably that he was the precursor of Bishop Wilkins in his speculations concerning a real character and a philosophical language; and it now appears to me equally clear, upon a further acquaintance with the short fragments which he has left behind him, that, if he did not lead the way to the attempt made by Dr Wallis to teach the dumb to speak, he had conceived views with respect to the means of instructing them, far more profound and comprehensive than any we meet with in the works of that learned writer prior to the date of Dalgarno's publications. On his claims in these two instances, I forbear to enlarge at present; but I cannot deny myself the satisfaction of transcribing a few paragraphs in justification of what I have already stated with respect to the remarkable coincidence between some of his theoretical deductions, and the practical results of the French Academician.

"I conceive there might be successful addresses made to a dumb child, even in its cradle, when he begins *risu cognoscere matrem*, if the mother or nurse had but as nimble a hand, as commonly they have a tongue. For instance, I doubt not but the words hand, foot, dog, cat, hat, &c., written fair, and as often presented to the deaf child's eye, pointing from the words to the things, and *vice versa*, as the blind child hears them spoken, would be known and remembered as soon by the one as the other; and as I think the eye to be as docile as the ear, so neither see I any reason but the hand might be made as tractable an organ as the tongue, and as soon brought to form, if not fair, at least legible characters, as the tongue to imitate and echo back articulate sounds.' 'The difficulties of learning to read on the common plan, are so great, that one may justly wonder how young ones come to get over them. Now, the deaf child, under his mother's tuition, passes securely by all these rocks and quicksands. The distinction of letters, their names, their powers, their order, the dividing words into syllables, and of them again making words, to which may be added tone and accent—none of these puzzling niceties hinder his progress. It is true, after he has passed the discipline of the nursery, and comes to learn grammatically, then he must begin to learn to know letters written, by their figures, number, and order.'

"The same author elsewhere observes, that 'the soul can exert her powers by the ministry of any of the senses; and therefore, when she is deprived of her principal secretaries, the eye and ear, then she must be contented with the service of her lackeys and scullions, the other senses; which are no less true and faithful to their mistress than the eye and the ear, but not so quick for despatch.'

"I shall only add one other sentence, from which my readers will be enabled, without any comment of mine, to perceive with what sagacity and success this very original thinker had anticipated some of the most refined experimental conclusions of a more enlightened age.

“ My design is not to give a methodical system of grammatical rules, but only such general directions, whereby an industrious tutor may bring his deaf pupil to the vulgar use and *ἔτι* of a language, that so he may be the more capable of receiving instruction in the *διότι*, from the rules of grammar, when his judgment is ripe for that study ; or, more plainly, I intend to bring the way of teaching a deaf man to read and write, as near as possible to that of teaching young ones to speak and understand their mother-tongue.”

“ In prosecution of this general idea, he has treated, in one very short chapter, of *A Deaf Man's Dictionary*, and in another of *A Grammar for Deaf Persons*, both of them containing (under the disadvantages of a style uncommonly pedantic and quaint) a variety of precious hints, from which, if I do not deceive myself, useful practical lights might be derived, not only by such as may undertake the instruction of such pupils, as Mitchell or Massieu, but by all who have any concern in the tuition of children during the first stage of their education.

“ That Dalgarno's suggestions with respect to the education of the dumb, were not altogether useless to Dr Wallis, will, I think, be readily admitted by those who take the trouble to compare his letter to Mr Beverley (published eighteen years after Dalgarno's treatise) with his *Tractatus de Loquela*, published in 1653. In this letter, some valuable remarks are to be found on the method of leading the dumb to the signification of words ; and yet the name of Dalgarno is not once mentioned to his correspondent.”

We may add, that Mr Stewart is far more lenient than Dr Wallis's disingenuousness merited. Wallis, in his letter to Mr Beverley, has plundered Dalgarno, even to his *finger alphabet*. It is no excuse, though it may in part account for the omission of Dalgarno's name, that Dalgarno, whilst he made little account in general of the teaching of the deaf and dumb to speak, had, in his chapter on the subject, passed over in total silence the very remarkable exploits in this department of “ the learned and my worthy friend Dr Wallis,” as he elsewhere styles him. On this subject, indeed, it seems to have been fated, that every writer should either be ignorant of, or should ignore, his predecessors. Bulwer, Lana, and Wallis, each professed himself original ; Dalgarno entitles his *Didascalocophus* “ the first, (for what the author knows) that had been published on the subject ;” and Amman, whose *Surdus Loquens* appeared only in 1692, makes solemn oath, “ that he had found no vestige of a similar attempt in any previous writer.”

The length to which these observations have run on the *Didascalocophus*, would preclude our entering on the subject of the other treatise—the *Ars Signorum*, were this not otherwise impossible within the limits of the present notice. But indeed the most general statement of the problem of an universal character, and

of the various attempts made for its solution, could hardly be comprised within the longest article. At the same time, regarding as we do the plan of a philosophical language, as a curious theoretical idea, but one which can never be practically realised, our interest in the several essays is principally limited to the ingenuity manifested by the authors, and to the minor philosophical truths incidentally developed in the course of these discussions. Of such, the treatise of Dalgarno is not barren; but that which principally struck us, is his remarkable anticipation, on speculative grounds, *a priori*, of what has been now articulately proved, *a posteriori*, by the Dutch philologers and Horne Tooke, (to say nothing of the ancients),—that the parts of speech are all reducible to the noun and verb, or to the noun alone.

VI.—IDEALISM.

WITH REFERENCE TO THE SCHEME OF ARTHUR COLLIER.

(APRIL, 1839.)

1. *Metaphysical Tracts by English Philosophers of the Eighteenth Century.* Prepared for the Press by the late Rev. SAMUEL PARR, D.D. 8vo. London: 1837.
2. *Memoirs of the Life and Writings of the Rev. Arthur Collier, M.A., Rector of Langford Magna, in the County of Wilts. From A.D. 1704, to A.D. 1732. With some Account of his Family.* By ROBERT BENSON, M.A. 8vo. London: 1837.

WE deem it our duty to call attention to these publications: for in themselves they are eminently deserving of the notice of the few who in this country take an interest in those higher speculations to which, in other countries, the name of *Philosophy* is exclusively conceded; and, at the same time, they have not been ushered into the world with those adventitious recommendations which might secure their intrinsic merit against neglect.

The fortune of the first is curious.—It is known to those who have made an active study of philosophy and its history, that there are many philosophical treatises written by English authors,—in whole or in part of great value, but, at the same time, of extreme rarity. Of these, the rarest are, in fact, frequently the most original: for precisely in proportion as an author is in advance of his age, it is likely that his works will be neglected; and the neglect of contemporaries in general consigns a book,—especially a small book,—if not protected by accidental concomitants, at once to the tobaccoist or tallow-chandler. This is more particularly the case with pamphlets, philosophical, and at the same time polemical. Of these we are acquainted with some, extant perhaps only in one or two copies, which display a metaphysical

talent unappreciated in a former age, but which would command the admiration of the present. Nay, oven of English philosophers of the very highest note, (strange to say!) there are now actually lying unknown to their editors, biographers, and fellow-metaphysicians, published treatises, of the highest interest and importance; [as of Cudworth, Berkeley, Collins, &c.]

We have often, therefore, thought that, were there with us a public disposed to indemnify the cost of such a publication, a collection, partly of treatises, partly of extracts from treatises, by English metaphysical writers, of rarity and merit, would be one of no inconsiderable importance. In any other country than Britain, such a publication would be of no risk or difficulty. Almost every nation of Europe, except our own, has, in fact, at present similar collections in progress—only incomparably more ambitious. Among others, there are in Germany the *Corpus Philosophorum*, by Gfroerer; in France, the *Bibliothèque Philosophique des Temps Modernes*, by Bouillet and Garnier; and in Italy, the *Collezione de' Classici Metafisici*, &c. Nay, in this country itself, we have publishing societies for every department of forgotten literature—except *Philosophy*.

But in Britain, which does not even possess an annotated edition of Locke,—in England, where the universities teach the little philosophy they still nominally attempt, like the catechism, by rote, what encouragement could such an enterprise obtain? It did not, therefore, surprise us, when we learnt that the publisher of the two works under review,—when he essayed what, in the language of "*the trade*" is called "*to subscribe*" The Metaphysical Tracts, found his brother booksellers indisposed to venture even on a single copy.—Now, what was the work which our literary purveyors thus eschewed as wormwood to British taste?

The late Dr Parr, whose erudition was as unexclusive as profound, had, many years previous to his death, formed the plan of reprinting a series of the rarer metaphysical treatises, of English authorship, which his remarkable library contained. With this view, he had actually thrown off a small impression of five such tracts, with an abridgement of a sixth; but as those probably formed only a part of his intended collection, which, at the same time, it is known he meant to have prefaced by an introduction, containing, among other matters, an historical disquisition on Idealism, with special reference to the philosophy of Collier, the

publication was from time to time delayed, until its completion was finally frustrated by his death. When his library was subsequently sold, the impression of the six treatises was purchased by Mr Lumley, a respectable London bookseller; and by him has recently been published under the title which stands as Number First at the head of this article.

The treatises reprinted in this collection are the following:—

“1. *Clavis Universalis; or a new Inquiry after Truth: being a demonstration of the non-existence or impossibility of an external world.* By Arthur Collier, Rector of Langford Magna, near Sarum. London: 1713.

2. *A specimen of True Philosophy*; in a discourse on Genesis, the first chapter and the first verse. By Arthur Collier, Rector of Langford Magna, near Sarum, Wilts. Not improper to be bound up with his *Clavis Universalis*. Sarum: 1730.

3. (An abridgement, by Dr Parr, of the doctrines maintained by Collier in his) *Logicology*, or Treatise on the Logos, in seven sermons on John 1. verses 1, 2, 3, 14, together with an Appendix on the same subject. 1732.

4. *Conjecturæ quædam de Sensu, Motu, et Idearum generatione.* (This was first published by David Hartley as an appendix to his Epistolary Dissertation, *De Lithontriptico* a J. Stephens nuper invento (Leyden, 1741, Bath, 1746); and contains the principles of that psychological theory which he afterwards so fully developed in his observations on Man.)

5. *An Inquiry into the Origin of the Human Appetites and Affections, showing how each arises from Association, with an account of the entrance of Moral Evil into the world.* To which are added some remarks on the independent scheme which deduces all obligation on God's part and Man's from certain abstract relations, truth, &c. Written for the use of the young gentlemen at the Universities. Lincoln: 1747. (The author is yet unknown.)

6. *Man in quest of himself; or a defence of the Individuality of the Human Mind, or Self.* Occasioned by some remarks in the Monthly Review for July 1763, on a note in Search's Freewill. By Cuthbert Comment, Gent. London: 1763. (The author of this is Search himself, that is, Mr Abraham Tucker.)”

These tracts are undoubtedly well worthy of notice; but to the first—the *Clavis Universalis* of Collier—as by far the most interesting and important, we shall at present confine the few observations which we can afford space to make.*

This treatise is in fact one not a little remarkable in the history of philosophy; for to Collier along with Berkeley is due the honour of having first explicitly maintained a theory of Absolute Idealism; and the *Clavis* is the work in which that theory is

* [It never rains but it pours. Collier's *Clavis* was subsequently reprinted, in a very handsome form, by a literary association in Edinburgh. Would that the books wanting reimpression, were first dealt with!]

developed. The fortune of this treatise, especially in its own country, has been very different from its deserts. Though the negation of an external world had been incidentally advanced by Berkeley in his *Principles of Human Knowledge*, some three years prior to the appearance of the *Clavis Universalis*, with which the publication of his *Dialogues between Hylas and Philonous* was simultaneous; it is certain, that Collier was not only wholly unacquainted with Berkeley's speculations, but had delayed promulgating his opinion till after a ten years' meditation. Both philosophers are thus equally original. They are also nearly on a level in scientific talent; for, comparing the treatise of Collier with the writings of Berkeley, we find it little inferior in metaphysical acuteness or force of reasoning, however deficient it may be in the graces of composition and the variety of illustration, by which the works of his more accomplished rival are distinguished. But how disproportioned to their relative merits has been the reputation of the two philosophers! While Berkeley's became a name memorable throughout Europe, that of Collier was utterly forgotten:—it appears in no British biography; and is not found even on the list of local authors in the elaborate history of the county where he was born, and of the parish where he was hereditary Rector! Indeed, but for the notice of the *Clavis* by *Dr Reid* (who appears to have stumbled on it in the College Library of Glasgow), it is probable that the name of Collier would have remained in his own country absolutely unknown—until, perhaps, our attention might have been called to his remarkable writings, by the consideration they had by accident obtained from the philosophers of other countries. In England the *Clavis Universalis* was *printed*, but there it can hardly be said to have been *published*; for it there never attracted the slightest observation; and of the copies now known to be extant of the original edition,

— “ *numerus vix est totidem quot
Thebarum porte vel divitis ostia Nili.* ”

The public libraries of Oxford and Cambridge, as Mr Benson observes, do not possess a single copy. There are, however, two in Edinburgh; and in Glasgow, as we have noticed, there is another.

The only country in which the *Clavis* can truly be said to have been hitherto published is Germany.

In the sixth supplemental volume of the *Acta Eruditorum* (1717) there is a copious and able abstract of its contents. Through this abridgement the speculations of Collier became known—particularly to the German philosophers; and we recollect to have seen them quoted, among others, by *Wolf* and *Bilfinger*.

In 1756 the work was, however, translated, without retrenchment, into German, by *Professor Eschenbach* of Rostock, along with Berkeley's *Dialogues between Hylas and Philonous*. These two treatises constitute his "Collection of the most distinguished Writers who deny the reality of their own body and of the whole corporeal world,"—treatises which he accompanied with "Counter observations, and an Appendix, in which the existence of matter is demonstrated:" These are of considerable value. [I have spoken of them, in *Stewart's Dissertation*, Note SS.] In reference to Collier's treatise, the translator tells us:—"If any book ever cost me trouble to obtain it, the *Clavis* is that book. Every exertion was fruitless. At length, an esteemed friend, Mr J. Selk, candidate of theology in Dantzic, sent me the work, after I had abandoned all hope of ever being able to procure it. The preface is wanting in the copy thus obtained—a proof that it was rummaged, with difficulty, out of some old book magazine. It has not, therefore, been in my power to present it to the curious reader, but I trust the loss may not be of any great importance."—In regard to the preface, Dr Eschenbach is, however, mistaken; the original has none.

By this translation, which has now itself become rare, the work was rendered fully accessible in Germany; and the philosophers of that country did not fail to accord to its author the honour due to his metaphysical talent and originality. The best comparative view of the kindred doctrines of Collier and Berkeley is indeed given by *Tennemann* (xi. 399, *sq.*); whose meritorious *History of Philosophy*, we may observe, does justice to more than one English thinker, whose works, and even whose name, are in his own country as if they had never been!

Dr Reid's notice of the *Clavis* attracted the attention of *Mr Dugald Stewart* and of *Dr Parr* to the work; and to the nominal celebrity which, through them, its author has thus tardily attained, even in Britain, are we indebted for Mr Benson's interesting "*Memoirs of the Life and Writings of Arthur Collier*": forming the second of the two publications prefixed to this article. What

was his inducement and what his means for the execution of this task, the biographer thus informs us.

* * * * *

Arthur Collier was born in 1680. He was the son of Arthur Collier, Rector of Langford-Magna, in the neighbourhood of Salisbury—a living, the advowson of which had for about a century been in possession of the family, and of which his great-grandfather, grandfather, father, and himself, were successively incumbents. With his younger brother, William, who was also destined for the Church, and who obtained an adjoining benefice, he received his earlier education in the grammar-school of Salisbury. In 1697 he was entered of Pembroke College, Oxford; but in the following year, when his brother joined him at the University, they both became members of Balliol. His father having died in 1697, the family living was held by a substitute until 1704, when Arthur, having taken priest's orders, was inducted into the Rectory, on the presentation of his mother. In 1707 he married a niece of Sir Stephen Fox; and died in 1732, leaving his wife, with two sons and two daughters, in embarrassed circumstances. Of the sons:—Arthur became a civilian of some note at the Commons; and Charles rose in the army to the rank of Colonel. Of the daughters:—Jane was the clever authoress of "The Art of Ingeniously Tormenting;" and Mary obtained some celebrity from having accompanied Fielding, as his wife's friend, in the voyage which he made in quest of health to Lisbon. Collier's family is now believed to be extinct.

Besides the *Clavis Universalis* (1713), *The Specimen of True Philosophy* (1730), and the *Logology* (1732), Collier was the author of two published *Sermons* on controversial points, which have not been recovered. Of his manuscript works the remains are still considerable, but it is probable that the greater proportion has perished. Our author was hardly less independent in his religious, than in his philosophical, speculations. In the latter he was an Idealist; in the former, an Arian (like Clarke,)—an Apollinarian,—and a High Churchman, on grounds which high churchmen could not understand. Of Collier as a parish priest and a theologian, Mr Benson supplies us with much interesting information. But it is only as a metaphysician that we at present consider him; and in this respect the *Memoirs* form a valuable supplement to the *Clavis*. Besides a series of letters in exposition of his philosophical system, they afford us, what is even more important,

an insight into the course of study by which Collier was led to his conclusion. With philosophical literature he does not appear to have been at all extensively conversant. His writings betray no intimate acquaintance with the works of the great thinkers of antiquity; and the compends of the German Seheiblerus and of the Scottish Baronius, apparently supplied him with all that he knew of the Metaphysics of the Schools. Locke is never once alluded to. Descartes and Malebranche, and his neighbour Mr Norris, were the philosophers whom he seems principally to have studied; and their works, taken by themselves, were precisely those best adapted to conduct an untrammelled mind of originality and boldness to the result at which he actually arrived.

Without entering on any general consideration of the doctrine of Idealism, or attempting a regular analysis of the argument of Collier, we hazard a few remarks on that theory,—simply with the view of calling attention to some of the peculiar merits of our author.

Mankind in general believe that an external world *exists*, only because they believe that they *immediately know it as existent*. As they believe that they themselves exist, because conscious of a *self* or *ego*; so they believe that something different from themselves exists, because they believe that they are also conscious of this *not-self* or *non-ego*.

In the first place, then, it is self-evident, that the existence of the external world cannot be doubted, if we admit that we do, as we naturally believe we do,—know it immediately as existent. If the fact of the *knowledge* be allowed, the fact of the *existence* cannot be gainsaid. The former involves the latter.

But, in the second place, it is hardly less manifest, that if our natural belief in the *knowledge* of the existence of an external world be disallowed as false, that our natural belief in the *existence* of such a world can no longer be founded on as true. Yet, marvellous to say, this has been very generally done.

For reasons to which we cannot at present advert, it has been almost universally denied by philosophers, that in sensitive perception we are conscious of any external reality. On the contrary, they have maintained, with singular unanimity, that what we are immediately cognitive of in that act, is only an *ideal object* in the mind itself. In so far as they agree in holding this opinion, philosophers may be called *Idealists* in contrast to mankind in general,

and a few stray speculators who may be called *Realists*—*Natural Realists*.

In regard to the relation or import of this ideal object, philosophers are divided; and this division constitutes two great and opposing opinions in philosophy. On the one hand, the majority have maintained that the ideal object of which the mind is conscious, is vicarious or representative of a real object, unknown immediately, or as existing, and known only mediately through this its ideal substitute. These philosophers, thus holding the existence of an external world—a world, however, unknown in itself, and therefore asserted only as an hypothesis, may be appropriately styled *Cosmothetic Idealists*—*Hypothetical* or *Assumptive Realists*. On the other hand, a minority maintain, that the ideal object has no external prototype; and they accordingly deny the existence of any external world. These may be denominated the *Absolute Idealists*.

Each of these great genera of Idealists is, however, divided and subdivided into various subordinate species.

The *Cosmothetic Idealists* fall primarily into two classes, inasmuch as some view the ideal or representative object to be a *tertium quid* different from the percipient mind as from the represented object; while others regard it as only a modification of the mind itself,—as only the percipient act considered as representative of, or relative to, the supposed external reality. The former of these classes is again variously subdivided, according as theories may differ in regard to the nature and origin of the vicarious object; as whether it be material or immaterial,—whether it come from without or rise from within,—whether it emanate from the external reality or from a higher source,—whether it be infused by God or other hyperphysical intelligences, or whether it be a representation in the Deity himself,—whether it be innate, or whether it be produced by the mind, on occasion of the presence of the material object within the sphere of sense, &c. &c.

Of *Absolute Idealism* only two principal species are possible; at least, only two have been actually manifested in the history of philosophy;—the *Theistic* and the *Egoistic*. The former supposes that the Deity presents to the mind the appearances which we are determined to mistake for an external world; the latter supposes that these appearances are manifested to consciousness, in conformity to certain unknown laws, by the mind itself. The

Theistic Idealism is again subdivided into *three*; according as God is supposed to exhibit the phænomena in question in his own substance,—to infuse into the percipient mind representative entities different from its own modification,—or to determine the *ego* itself to an allusive representation of the *non-ego*.*

Now it is easily shown, that if the doctrine of Natural Realism be abandoned,—if it be admitted or be proved, that we are deceived in our belief of an immediate knowledge of aught beyond the mind; then, Absolute Idealism is a conclusion philosophically inevitable, the assumption of an external world being now an assumption which no necessity legitimates, and which is therefore philosophically inadmissible. On the law of parsimony it must be presumed null.

It is, however, historically true, that Natural Realism had been long abandoned by philosophers for Cosmothetic Idealism, before the grounds on which this latter doctrine rests were shown to be unsound. These grounds are principally the following:—

1.)—In the *first* place, the natural *belief in the existence* of an external world was allowed to operate even when the natural *belief of our immediate knowledge* of such a world was argued to be false. It might be thought that philosophers, when they maintained that one original belief was illusive, would not contend that another was veracious,—still less that they would assume, as true, a belief which existed only as the result of a belief which they assumed to be false. But this they did. The Cosmothetic Idealists, all deny the validity of our natural belief in our knowledge of the existence of external things; but we find the majority of them, at the same time, maintaining that such existence must be admitted on the authority of our natural belief of its reality. And yet, the latter belief exists only in and through the former; and if the former be held false, it is, therefore, of all absurdities the greatest to view the latter as true. Thus Descartes, after arguing that mankind are universally deluded in their conviction that they have any immediate knowledge of aught beyond the modifications of their own minds; again argues that the existence of an external world must be admitted,—because, if it do not exist, God deceives, in impressing on us a belief in its reality; but God is no deceiver; therefore, &c. This

* [For a more detailed view of these distinctions, see Diss. on Reid, pp. 816—819; Compare also above, pp. 55, 56, *sq.*]

reasoning is either good for nothing, or good for more than Descartes intended. For on the one hand, if God be no deceiver, he did not deceive us in our natural belief that we know something more than the mere modes of self; but then the fundamental position of the Cartesian philosophy is disproved: and if, on the other hand, this position be admitted, God is thereby confessed to be a deceiver, who, having deluded us in the belief on which our belief of an external world is founded, cannot be consistently supposed not to delude us in this belief itself. Such melancholy reasoning is, however, from Descartes to Dr Brown, the favourite logic by which the Cosmothetic Idealists in general attempt to resist the conclusion of the Absolute Idealists. But on this ground there is no tenable medium between Natural Realism and Absolute Idealism.

It is curious to notice the different views, which *Berkeley* and *Collier*, our two Absolute Idealists, and which *Dr Samuel Clarke*, the acutest of the Hypothetical Realists with whom they both came in contact, took of this principle.

Clarke was, apparently, too sagacious a metaphysician not to see that the proof of the reality of an external world reposed mainly on our natural belief of its reality; and at the same time that this natural belief could not be pleaded in favour of his hypothesis by the Cosmothetic Idealist. He was himself conscious, that his philosophy afforded him no arms against the reasoning of the Absolute Idealist; whose inference he was, however, inclined neither to admit, nor able to show why he should not. Whiston, in his *Memoirs*, speaking of Berkeley and his Idealism, says:—"He was pleased to send Dr Clarke and myself, each of us, a book. After we had both perused it, I went to Dr Clarke and discoursed with him about it to this effect:—That I, being not a metaphysician, was not able to answer Mr Berkeley's subtile premises, though I did not at all believe his absurd conclusion. I, therefore, desired that he, who was deep in such subtilities, but did not appear to believe Mr Berkeley's conclusions, would answer him; *which task he declined.*" Many years after this, as we are told in the *Life of Bishop Berkeley*, prefixed to his works:—"There was, at Mr Addison's instance, a meeting of Drs Clarke and Berkeley to discuss this speculative point; and great hopes were entertained from the conference. The parties, however, separated without being able to come to any agreement. Dr Berkeley declared himself not well satisfied with the conduct of

his antagonist on the occasion, *who, though he could not answer, had not candour enough to own himself convinced.*"

Mr Benson affords us a curious anecdote to the same effect in a letter of Collier to Clarke. From it we learn,—that when Collier originally presented his *Clavis* to the Doctor, through a friend, on reading the title, Clarke good-humouredly said:—"Poor gentleman! I pity him. He would be a philosopher, but has chosen a strange task; for he can neither prove his point himself, nor can the contrary be proved against him."

In regard to the two Idealists themselves, each dealt with this ground of argument in a very different way; and it must be confessed that in this respect Collier is favourably contrasted with Berkeley.—*Berkeley* attempts to enlist the natural belief of mankind in his favour against the Hypothetical Realism of the philosophers. It is true, that natural belief is opposed to scientific opinion. Mankind are not, however, as Berkeley reports, Idealists. In this he even contradicts himself; for, if they be, in truth, of his opinion, why does he dispute so anxiously, so learnedly against them?—*Collier*, on the contrary, consistently rejects all appeal to the common sense of mankind. The motto of his work, from Malebranche, is the watchword of his philosophy:—" *Vulgi assensus et approbatio circa materiam difficilem, est certum argumentum falsitatis istius opinionis cui assentitur.*" And in his answer to the Cartesian argument for the reality of matter, from "that strong and natural inclination which all men have to believe in an external world;" he shrewdly remarks on the inconsistency of such a reasoning at such hands:—"Strange! That a person of Mr Descartes' sagacity should be found in so plain and palpable an oversight; and that the late ingenious Mr Norris should be found treading in the same track, and that too upon a solemn and particular disquisition of this matter. That whilst, on the one hand, they contend against the common inclination or prejudice of mankind, that the visible world is not external, they should yet appeal to this same common inclination for the truth or being of an external world, which on their principles must be said to be invisible; and for which therefore (they must needs have known, if they had considered it), there neither is, nor can be, any kind of inclination." (P. 81.)

2.)—In the *second* place, it was very generally assumed in antiquity, and during the middle ages, that an external world was a supposition necessary to render possible the fact of our

sensitive cognition. The philosophers who held, that the immediate object of perception was an emanation from an outer reality, and that the hypothesis of the latter was requisite to account for the phenomenon of the former,—their theory involved the existence of an external world as its condition. But from the moment that the necessity of this condition was abandoned, and this was done by many even of the scholastic philosophers;—from the moment that sensible species or the vicarious objects in perception were admitted to be derivable from other sources than the external objects themselves, as from God, or from the mind itself: from that moment we must look for other reasons than the preceding, to account for the remarkable fact, that it was not until after the commencement of the eighteenth century, that a doctrine of Absolute Idealism was, without communication, contemporaneously promulgated by Berkeley and Collier.

3.)—In explanation of this fact, we must refer to a *third* ground, which has been wholly overlooked by the historians of philosophy; but which it is necessary to take into account, would we explain how so obvious a conclusion as the negation of the existence of an outer world, on the negation of our immediate knowledge of its existence, should not have been drawn by so acute a race of speculators as the philosophers of the middle ages, to say nothing of the great philosophers of a more recent epoch. This ground is:—*That the doctrine of Idealism is incompatible with the Catholic doctrine of the Eucharist.* It is a very erroneous statement of Reid, in which, however, he errs only in common with other philosophers, that “*during the reign of the Peripatetic doctrine, we find no appearance of scepticism about the existence of matter.*” On the contrary, during the dominance of the scholastic philosophy, we find that the possibility of the non-existence of matter was contemplated; nay, that the *reasons* in support of this supposition were expounded in *all their cogency*. We do not, however, find the conclusion founded on these reasons formally professed. And why? Because this conclusion, though philosophically proved, was theologically disproved; and such disproof was during the middle ages sufficient to prevent the overt recognition of any speculative doctrine; for with all its ingenuity and boldness, philosophy during these ages was confessedly in the service of the church,—it was always *Philosophia ancillans Theologie*. And this because the service was voluntary;—a thralldom indeed of love. Now, if the reality of matter

were denied, there would, in general, be *denied the reality of Christ's incarnation*; and in particular *the transubstantiation into his body of the elements of bread and wine*. There were other theological reasons indeed, and these not without their weight; but this was, perhaps, the only one insuperable to a Catholic.

We find the influence of this reason at work in very ancient times. It was employed by the earlier *Fathers*, and more especially in opposition to Marcion's doctrine of the merely phænomenal incarnation of our Saviour.—“Non licet” (says *Tertullian* in his book *De Anima*, speaking of the Evidence of Sense—“non licet nobis in dubium sensus istus revocare, ne et in Christo de fide eorum deliberetur: ne forte dicatur, quod falso Satanam prospectarit de cælo præcipitatum; aut falso vocem Patris audierit de ipso testificatam; aut deceptus sit cum Petri socrum tetegit. . . . Sie et Marcion phantasma cum maluit credere, totius corporis in illo dedignatus veritatem.” (Cap. xvii.) And in his book, *Adversus Marcionem*:—“Ideo Christus non erat quod videbatur, et quod erat mentiebatur; caro, nec caro; homo nec homo: proinde Deus Christus, nec Deus; eum enim non etiam Dei phantasma portaverit? An credam ei de interioro substantia, qui sit de exterioro frustratus? Quomodo verax habebitur in occulto, tam fallax repertus in aperto? . . . Jam nunc quum mendacium deprehenditur Christus caro; sequitur ut omnia quæ per carnem Christi gesta sunt, mendacio gesta sint,—congressus, contactus, convictus, ipsæ quoque virtutes. Si enim tangendo aliquem, liberavit a vitio, non potest vere actum eredi, sine corporis ipsius veritate. Nihil solidum ab inani, nihil plenum a vacuo perfici licet. Putativus habitus, putativus actus; imaginarius operator, imaginariæ operæ.” (Lib. iii. c. 8.)—In like manner, *St Augustine*, among many other passages:—“Si phantasma fuit corpus Christi, fefellit Christus; et si fefellit, veritas non est. Est autem veritas Christus; non igitur phantasma fuit corpus ejus.” (Liber *De lxxxiii. Questionibus*, qu. 14.)—And so many others.

The repugnancy of the Catholic dogma of transubstantiation with the surrender of a substantial prototype of the species presented to our sensible perceptions, was, however, more fully and precisely signalled by the *Schoolmen*; as may be seen in the polemic waged principally on the great arena of scholastic subtlety—the commentaries on the four books of the *Sentences* of Peter Lombard. In their commentaries on the first book, especially, will be found abundant speculation of an idealistic tendency.

The question is almost regularly mooted :—*May not God preserve the species* (the *ideas* of a more modern philosophy) *before the mind, the external reality represented being destroyed?*—*May not God, in fact, object to the sense the species representing an external world, that world, in reality, not existing?* To these questions the answer is, always in the first instance, affirmative. Why then, the possibility, the probability even, being admitted, was the fact denied. Philosophically orthodox, it was theologically heretical; and their principal argument for the rejection is, that on such hypothesis, the doctrine of a transubstantiated eucharist becomes untenable. A change is not,—cannot be,—(spiritually) *real*.

Such was the special reason, why many of the acuter Schoolmen did not follow out their general argument, to the express negation of matter; and such also was the only reason, to say nothing of other Cartesians, why *Malebranche* deformed the simplicity of his peculiar theory with such an assumptive *hors d'œuvre*, as an unknown and otiose universe of matter. It is, indeed, but justice to that great philosopher to say,—that if the incumbrance with which, as a Catholic, he was obliged to burden it, be thrown off his theory, that theory becomes one of Absolute Idealism; and that, in fact, all the principal arguments in support of such a scheme are found fully developed in his immortal *Inquiry after Truth*. This *Malebranche* well knew; and knowing it, we can easily understand, how *Berkeley's* interview with him ended as it did.*

Malebranche thus left little for his Protestant successors to do. They had only to omit the Catholic excrescence; the reasons vindicating this omission they found collected and marshalled to their

* [I cannot, however, concur in the praise of novelty and invention, which has always been conceded to the central theory of *Malebranche*. His "*Vision of all things in the Deity*," is, as it appears to me, simply a transference to man in the flesh, to the *Viator*, of that mode of cognition, maintained by many of the older Catholic divines, in explanation of how the Saints, as disembodied spirits, can be aware of human invocations, and, in general, of what passes upon earth. "*They perceive*," it is said, "*all things in God*." So that, in truth, the philosophical theory of *Malebranche*, is nothing but the extension of a theological hypothesis, long common in the schools; and with scholastic speculations, *Malebranche* was even intimately acquainted. —This hypothesis I had once occasion to express:—

" *Quidquid, in his tenebris vitæ, te carne lateret,
Nunc legis in magno cuncta, beate, Deo.*"]

hand. That Idealism was the legitimate issue of the Malebranchian doctrine, was at once seen by those competent to metaphysical reasoning. This was signalled, in general, by Bayle, and, what has not been hitherto noticed, by Locke.* It was,

* Compare Locke's Examination of P. Malebranche's Opinion, (§ 20.)

When on this subject, we may clear up a point connected therewith, of some interest, in relation to *Locke* and *Newton*, and which has engaged the attention of Dr Reid and Mr Dugald Stewart.

Reid, who has overlooked the passage of Locke just referred to, says, in deducing the history of the Berkeleian Idealism, and after speaking of Malebranche's opinion :—"It may seem strange that Locke, who wrote so much about ideas, should not see those consequences which Berkeley thought so obviously deducible from that doctrine. . . . There is, indeed, a single passage in Locke's essay, which may lead one to conjecture that he had a glimpse of that system which Berkeley afterwards advanced, but thought proper to suppress it within his own breast. The passage is in Book IV., c. 10, where, having proved the existence of an eternal, intelligent mind, he comes to answer those who conceive that matter also must be eternal, because we cannot conceive how it could be made out of nothing; and, having observed that the creation of mind requires no less power than the creation of matter, he adds what follows:—"Nay, possibly, if we could emancipate ourselves from vulgar notions, and raise our thoughts, as far as they would reach, to a closer contemplation of things, we might be able to aim at some dim and seeming conception, how matter might at first be made and begin to exist by the power of that eternal first Being; but to give beginning and being to a spirit, would be found a more inconceivable effect of omnipotent power. But this being what would, perhaps, lead us too far from the notions on which the philosophy now in the world is built, it would not be pardonable to deviate so far from them, or to inquire, so far as grammar itself would authorise, if the common settled opinion oppose it; especially in this place, where the received doctrine serves well enough to our present purpose." Reid then goes on at considerable length to show, that "every particular Mr Locke has hinted with regard to that system which he had in his mind, but thought it prudent to suppress, tallies exactly with the system of Berkeley." (*Intellectual Powers*, Ess. II. ch. 10.)

Stewart does not coincide with Reid. In quoting the same passage of Locke, he says of it, that "when considered in connection with some others in his writings, it would almost tempt one to think, that a theory concerning matter, somewhat analogous to that of Boscovich, had occasionally passed through his mind;" and then adduces various reasons in support of this opinion, and in opposition to Reid's. (*Philosophical Essays*, Ess. II. ch. 1, p. 63.)

The whole arcana in the passage in question is, however, revealed by *M. Coste*, the French translator of the Essay, and of several other of the works of Locke, *with whom the philosopher lived in the same family, and on the most intimate terms, for the last seven years of his life; and who, though he has never been consulted, affords often the most important information in*

therefore, but little creditable to the acuteness of *Norris*, that he, a Protestant, should have adopted the Malebranchian hypothesis, without rejecting its Catholic incumbrance. The honour of first promulgating an articulate scheme of absolute idealism was thus left to *Berkeley* and *Collier*; and though both are indebted to Malebranche for the principal arguments they adduce, each is also entitled to the credit of having applied them with an ingenuity peculiar to himself.

It is likewise to the credit of *Collier's* sagacity that he has noticed (and he is the only modern philosopher, we have found, to have anticipated our observation,) the incompatibility of the Catholic doctrine of the Eucharist with the non-existence of matter. In the concluding chapter of his work, in which he speaks "of the use and consequences of the foregoing treatise," he enumerates as one "particular usefulness with respect to religion,"

regard to Locke's opinions. To this passage there is in the *fourth* edition of Coste's translation, a very curious note appended, of which the following is an abstract. "Here Mr Locke excites our curiosity without being inclined to satisfy it. Many persons having imagined that he had communicated to me this mode of explaining the creation of matter, requested, when my translation first appeared, that I would inform them what it was; but I was obliged to confess, that Mr Locke had not made even me a partner in the secret. At length, long after his death, Sir *Isaac Newton*, to whom I was accidentally speaking of this part of Mr Locke's book, discovered to me the whole mystery. He told me, smiling, that it was he himself who had imagined this manner of explaining the creation of matter, and that the thought had struck him, one day, when this question chanced to turn up in a conversation between himself, Mr Locke, and the late Earl of Pembroke. The following is the way in which he explained to them his thought:—'We may be enabled' (he said) 'to form some rude conception of the creation of matter, if we suppose that God by his power had prevented the entrance of any thing into a certain portion of pure space, which is of its nature penetrable, eternal, necessary, infinite; for henceforward this portion of space would be endowed with impenetrability, one of the essential qualities of matter: and as pure space is absolutely uniform, we have only again to suppose that God communicated the same impenetrability to another portion of space, and we should then obtain in a certain sort the notion of the mobility of matter, another quality which is also very essential to it.' Thus, then, we are relieved of the embarrassment of endeavouring to discover what it was that Mr Locke had deemed it advisable to conceal from his readers: for the above is all that gave him occasion to tell us,—'if we would raise our thoughts as far as they could reach, we might be able to aim at some dim and seeming conception how matter might at first be made,' &c.—This suffices to show what was the general purport of Locke's expressions, and that Mr Stewart's conjecture is at least nearer to the truth than Dr Reid's. [Compare Newton Opt. q. 31.]

the refutation it affords of "the real presence of Christ's body in the Eucharist, in which the Papists have grafted the doctrine of transubstantiation." He says:—

"Now nothing can be more evident, than that both the sound and explication of this important doctrine are founded altogether on the supposition of external matter; so that, if this be removed, there is not any thing left whereon to build so much as the appearance of a question.—For if, after this, it be inquired *whether the substance of the bread, in this sacrament, be not changed into the substance of the body of Christ*, the accidents or sensible appearances remaining as before; or suppose this should be affirmed to be the fact, or at least possible, it may indeed be shown to be untrue or impossible, on the supposition of an external world, from certain consequential absurdities which attend it; but *to remove an external world, is to prick it in its punctum saliens, or quench its very vital flame*. For if there is no external matter, the very distinction is lost between the substance and accidents, or sensible species of bodies, and these last will become the sole essence of material objects. So that, if these are supposed to remain as before, there is no possible room for the supposal of any change, in that the thing supposed to be changed, is here shown to be nothing at all." (P. 95.)

But we must conclude.—What has now been said, in reference to a part of its contents, may perhaps contribute to attract the attention, of those interested in the higher philosophy, to this very curious volume. We need hardly add, that Mr Benson's *Memoirs of Collier* should be bound up along with it.

LITERATURE.

I.—EPISTOLÆ OBSCURORUM VIRORUM;

THE NATIONAL SATIRE OF GERMANY.*

(MARCH, 1831.)

Epistolæ Obscurorum Virorum, aliaque ævi decimi sexti monumenta rarissima.—*Die Briefe der Finsterlinge an Magister Ortuinus von Deventer, nebst andern sehr seltenen Beytraegen zur Litteratur-Sitten- und Kirchengeschichte des Sechzehnten Jahrhunderts.* Herausgegeben und erläutert durch DR ERNST MÜNCH. 8vo. Leipzig: 1827.

WITH the purest identity of origin, the Germans have shown always the weakest sentiment of nationality. Descended from the same ancestors, speaking a common language, unconquered by a foreign enemy, and once the subjects of a general government, they are the only people in Europe who have passively allowed their national unity to be broken down, and submitted, like cattle, to be parcelled and reparcelled into flocks, as suited the convenience of their shepherds. The same unpatriotic apathy is betrayed in their literary as in their political existence. In other countries taste is perhaps too exclusively national; in Germany it is certainly too cosmopolite. Teutonic admiration seems,

* [Translated into German by Dr Vogler, in the *Altes und Neues* of 1832; after being largely extracted in various other literary journals of the Empire. I am aware of no attempt to gainsay the proof of authorship here detailed; or, in general, the justice of the criticism.—A considerable number of additions have been inserted in this article; but these, as they affect no personal interest, it has not been thought necessary often to distinguish.]

indeed, to be essentially centrifugal; and literary partialities have in the Empire inclined always in favour of the foreign. The Germans were long familiar with the literature of every other nation, before they thought of cultivating, or rather creating, a literature of their own; and when this was at last attempted, *δαίμων τῶν ἀπείρων* was still the principle that governed in the experiment. It was essayed, by a process of foreign infusion, to elaborate the Gorman tongue into a vehicle of pleasing communication; nor were they contented to reverse the operation, until the project had been stultified by its issue, and the purest and only all-sufficient of the modern languages degraded into a Babylonish jargon, without a parallel in the whole history of speech. A counterpart to this overweening admiration of the strange and distant, is the discreditable indifference manifested by the Germans to the noblest monuments of native genius. To their eternal disgrace, the works of Leibnitz were left to be collected by a Frenchman; while the care denied by his countrymen to the great representative of Gorman universality, was lavished, with an eccentric affection, on the not more important speculations of Giordano Bruno, Spinoza, and Cudworth. But no neglect, even by their own confession, has weighed so long or so heavily against the Germans, as the want of a collective edition of the works of their great national patriot, ULRICH VON HUTTEN, and of a critical and explanatory edition of their great national satire, the *EPISTOLÆ OBSCURORUM VIRORUM*. This reproach has, in part, been recently removed. Dr Muench has accomplished the one, and attempted the other; we wish we could say,—accomplished well, or attempted successfully. We speak at present only of the latter; and, as an essay towards (what is still wanting) an explanatory introduction, shall premise a rapid outline of the circumstances which occasioned this celebrated satire,—a satire which, though European in its influence, has yet, as Herder justly observes, “effected for Germany incomparably more, than Hudibras for England, or Garagantua for France, or the Knight of La Mancha for Spain.” It gave the victory to Reuchlin over the Begging Friars, and to Luthor over the Court of Rome.

The Italians excepted, no people took so active a part in the revival of ancient literature as the Germans; yet in no country did the champions of the new intelligence obtain less adventitious aid in their exertions, or encounter so formidable a resistance

from the defenders of the ancient barbarism. Germany did not, like Italy and France, allure the learned fugitives from Constantinople, to transplant into her seminaries the language and literature of Greece; and though learning was not here deprived of all liberal encouragement, still the princes and nobles of the Empire did not, as the great Italian families, emulate each other, in a munificent patronage of letters. But what in Germany principally contributed to impede the literary reformation, was the opposition which it met with in the great literary corporations themselves. In the other countries of Europe, especially in France and England, the first sparks of the rekindled light had been fostered in the universities;* these were in fact the centres from whence the new illumination was diffused. In Germany, on the contrary, the academic walls contained the most resolute enemies of reform, and in the universities were found the last strongholds of an effete, but intolerant scholasticism. Some, indeed, of the restorers of polite letters, taught as salaried or extraordinary instructors, (*professores conducti*,) in the universities of Germany; but their influence was personal, and the toleration which they obtained, precarious. Dependent always on the capricious patronage of the Prince, they were viewed as intruders by those bodies who constituted and governed these institutions. From them they encountered, not only discouragement, but oppression; and the biography of the first scholars who attempted, by public instruction, to disseminate a taste for classical literature in the great schools of Germany, exhibits little else than a melancholy series of wanderings and persecutions,—abandoning one university only, in general, to be ejected from another.

The restoration of classical literature, (and classical literature involved literature in general,) was in Germany almost wholly accomplished by individual zeal, aided, principally, by one private institution. This institution was the conventual seminary of St Agnes, near Zwoil, in Westphalia, founded by the pious Thomas à Kempis; from whence, immediately or mediately, issued nearly the whole band of those illustrious scholars who, in defiance of every opposing circumstance, succeeded in rapidly

* No thanks, however, to the Universities. They, of course, resisted the innovation. A king and a minister, Francis and Wolsey, determined the difference; but for them, Budæus and Colet might have been persecuted like Buschius and Reuchlin.

elevating Germany to a higher European rank in letters, than (rebarbarised by polemical theology and religious wars,) she was again able to reach for almost three centuries thereafter.

Six schoolfellows and friends,—Count Maurico von Spiegelberg, Rodolph von Lange (Langius), Alexander Hegius, Lewis Dringenberg, Antonius Liber, and Rodolphus Agricola,—all trained in the discipline of à Kempis, became, towards the end of the fifteenth century, the apostles of this reform in literature and education; and this, mainly by their exertions with those of their disciples, was, in a few years, happily accomplished throughout the empire. The *two first*, (we neglect chronology), noblemen of rank and dignitaries in the church, co-operated to this end, by their liberal patronage of other scholars, and more especially by the foundation of improved schools; the *four last*, by their skill and industry as practical teachers, and by the influence of their writings.*

After their return from Italy, where they had studied under Trapezuntius and Gaza, and enjoyed the friendship of Philadelphus, Laurentius Valla, and Leonardus Aretinus, *Von Lange* was nominated Dean of Munster, and *Count Spiegelberg*, Provost of Emmerich.—Through the influence of the *former*, himself a Latin poet of no inconsiderable talent, the decayed school of Munster was revived; supplied with able masters, among whom Camenerius, Cæsarius, and Murmellius, were distinguished; and, in spite of every opposition from the predicant friars and university of Cologno, the barbarous schoolbooks were superseded, and the heathen classics studied, as in the schools of Italy and France. From this seminary, soon after its establishment, proceeded Petrus

* An account of the *Fratres Hieronymici* would be an interesting piece of literary history. The scattered notices to be found of this association are meagre and incorrect. We may observe, that the celebrated Frieslander, *John Wessel* of Gansfurt, an alumnus also of the College of St Agnes, preceded the six confederates, enumerated in the text, as a restorer of letters in Germany. Before Renschlin, (whom he initiated in Hebrew,) he conjoined a knowledge of the three learned languages; these, which he had cultivated in Greece, Italy, and France, he taught, at least privately, on his return to Germany, in the universities of Cologne, Heidelberg, and Basle. His erudition, his scholastic subtlety, with his contempt for scholastic authority, obtained for him the title of *Lux Mundi* and *Magister Contradictionum*. In religious opinions, he was the forerunner of Luther. He is not to be confounded (as has been done) with the famous preacher, *Joannes*, variously called *Wesalius*, *de Wessalia*, and even *Wesselus*, accused by the Dominicans of suspicious intercourse with the Jews, and, through their influence, unjustly condemned for heresy in 1479, by the Archbishop of Mentz.

Nehemius, Josephus Horlenius, (the master of Mosellanus,) Ludolphus Heringius, Alexander Moppensis, Tilemannus Mollerus, (the master of Rivius,) &c., who, as able schoolmasters, propagated the improvement in education and letters throughout the north of Germany.

A similar reform was effected by *Count Spiegelberg* in the school of Eimnerich.

Hegius, a man of competent learning, but of unrivalled talents as a practical instructor, became rector of the school of Daventer; and he can boast of having turned out from his tuition a greater number of more illustrious scholars than any pedagogue of modern times. Among his pupils were, Desiderius Erasmus, Hermannus Buschius, Joannes Cæsarius, Joannes Mummellius, Joannes Glandorpheus, Conradus Mutianus, Hermannus Torrentinus, Bartholomæus Coloniensis, Conradus Goclenius, the Aedicollii, Joannes and Serratus, Jacobus Montanus, Joannes Peringius, Timannus Camenerius, Gerardus Lystrius, Matthæus Frissemius, Ludolphus Geringius, &c. Nor must Ortuinus Gratus be forgotten.

Dringenberg transplanted the discipline of Zwoll to Schlechtstadt in Alsace; and he effected for the South of Germany what his colleagues accomplished for the north. Among his pupils, who almost rivalled in numbers and celebrity those of Hegius, were Conradus Celtes, Jacobus Wimphelingius, Beatus Rhenanus, Joannes Sapidus, Bilibald Pirkheimer, John von Dalberg, Franciscus Stadianus, Georgo Simler, (the master of Melancthon,) and Henricus Bebelius, (the master of Brassicanus and Heinrichmann.)

Liber taught successfully at Kompten and Amsterdam; and, when driven from these cities by the partisans of the ancient barbarism, he finally established himself at Almar. The most celebrated of his pupils were Pope Hadrian VI., Nicolaus Clenardus, Alardus of Amsterdam, Cornelius Crocus, and Christophorus Longolius.

The genius of *Agricola* displayed the rarest union of originality, elegance, and erudition. After extorting the reluctant admiration of the fastidious scholars of Italy, he returned to Germany, where his writings, exhortation, and example, powerfully contributed to promote the literary reformation. It was only, however, in the latter years of his short life, that he was persuaded by his friend, Von Dalberg, Bishop of Worms, to lecture publicly (though declining the status of Professor) on the Greek and Roman authors; and he delivered, with great applause, a few courses,

alternately at Heidelberg and Worms. Celtes and Buschius were among his auditors. There is no hyperbole in his epitaph by a great Italian :—

“ Scilicet hoc nunc meruit Germania, laudis
Quicquid habet Latium, Græcia quicquid habet.”

The first restorers of ancient learning in Germany were thus almost exclusively pupils of à Kempis or of his disciples. There was, however, one memorable exception in *John Reuchlin* (Joannes Capnio), who was not, as his biographers erroneously assert, a scholar of Dringenberg at Schlechtstadt.* Of him we are again to speak.

We have been thus particular, in order to show that the awakened enthusiasm for classical studies did not in Germany originate in the Universities; and it was only after a strenuous opposition from these bodies that ancient literature at last conquered its recognition as an element of academical instruction. At the period of which we treat, the prelections and disputations, the examinations and honours, of the different faculties, required only an acquaintance with the barbarous Latinity of the middle ages. The new philology was thus not only a *hors d'œuvre*, in the academical system, or, as the Leipzig Masters expressed it, a “ fifth wheel in the waggon; ” it was abominated as a novelty, that threw the ancient learning into discredit, diverted the studious from the Universities, emptied the schools of the Magistri, and the bursæ or colleges over which they presided, and rendered contemptible the once honoured distinction of a degree.†

* His connexion with Zwoll and the *Brethren of St Jerome* may, however, be established through John Wessel, from whom he learned the elements of Hebrew.

† “ Attamen intellexi,” writes Magister Unkenbunck to Magister Gratus, “ quod habetis paucos auditores, et est querela vestra, quod Buschius et Cæsarius trahunt vobis scholares et supposita abinde, cum tamen ipsi non sciunt ita exponere Poëtas allegorice, sicut vos, et superallegare sacram scripturam. Credo quod diabolus est in illis Poëtis. Ipsi destruunt omnes Universitates, et audiavi ab nro antiquo Magistro Lipsensi, qui fuit Magister 36 annorum, et dixit mihi, quando ipse fuisset juvenis, tunc illa Universitas bene stetit: quia in viginti milliaribus nullus Poëta fuisset. Et dixit etiam, quod tunc supposita diligenter compleverunt lectiones suas formales et materiales, sen bursales: et fuit magnum scandalum, quod aliquis studens iret in platen, et non haberet Petrum Hispanum, aut Parva Logicalia sub brachio. Et si fuerunt Grammatici, tunc portabant Partes Alexandri, vel Vade Mecum, vel Exercitium Puerorum, aut Opus Minus, aut Dicta Ioan. Sinthen. Et in

In possession of power, it is not to be supposed that the patrons of scholasticism would tamely allow themselves to be stripped of reputation and influence; and it did not require the ridicule with which the "*Humanists*," or "*Poets*," as they were styled, now assailed them, to exasperate their spirit of persecution. Greek in particular, and polite letters in general, were branded as heretical;* and, while the academical youth hailed the first lecturers on ancient literature in the Universities, as "messengers from Heaven,"† the academical veterans persecuted these intruders

scholis advertchant diligenter, et habnerunt in honore Magistros Artium, et quando viderunt unum Magistrum, tunc fuerunt perterriti, quasi viderent unum Diabolum. Et dicit etiam, quod pro tunc, quater in anno promovebantur Baccalarii, et semper pro una vice sunt sexaginta aut quinquaginta. Et illo tempore Universitas illa fuit multum in flore, et quando unus stetit per annum cum dimidio, fuit promotus in Baccalarium, et per tres annos aut duos cum dimidio, in Magistrum. Et sic parentes eorum fuerunt contenti, et libenter exposuerunt pecunias; quia videbant, quod filii sui venerunt ad honores. Sed nunc supposita volunt audire Virgilium et Plinium, et alios novos autores, et licet andinnt per quinque annos, tamen non promoveantur. Et dixit mihi amplius talis Magister, quod tempore suo fuerunt duo millia studentes in Lyptzick, et Erfordie totidem. Et Viennæ quatuor millia, et Colonie etiam tot, et sic de aliis. Nunc autem in omnibus Universitatibus non sunt tot supposita, sicut tunc in una, aut duabus. Et Magistri Lipsenses nunc valde conqueruntur de paucitate suppositorum, quia Poetæ faciunt eis damnum. Et quando parentes mittunt filios suos in buras, et collegia, non volunt ibi manere, sed vadunt ad Poetas, et student nequitiis. Et dixit mihi, quod ipse Liptzick olim habuit quadraginta domicellos, et quando ivit in ecclesiam, vel ad forum, vel spaciatum in rubetum, tunc iverunt post eum. Et fuit tunc magnus excessus, studere in Poëtria. Et quando unus confitebatur in confessione, quod occulte audivit Virgilium ab uno Baccalario, tunc Sacerdos imponebat ei magnam penitentiam, videbatur, jejnnare singulis sextis feriis vel orare quotidie septem Psalmos penitentiales. Et jnravit mihi in conscientia sua, quod vidit; quod unus magistrandus fuit rejectus, quia nunc de examinadoribus semel in die festo vidit ipsum legere in Terentio. Utinam adhuc staret ita in Universitatibus!" etc. (Epist. Obs. Vir.—Vol. II. ep. 46. See also among others, Vol. II. ep. 58 and 63. We quote these epistles by number, though this be marked in none of the editions.—I may notice: in German, the same word stands for the indefinite article, and for the numeral of unity;—*ein*. Hence by these barbarians, the use of the Latin *unus*.

* "*Hæresis*," says Erasmus, speaking of these worthies,—"*hæresis est polite loqui, hæresis Græce scire; quicquid ipsi non intelligunt, quicquid ipsi non faciunt, hæresis est. In nunc Capniouem clamatur, quia linguas callet.*" (Opera III. c. 517. ed. Clerici.) See also Peutingier, in Epist. ad Rensch. (sig. A ii.) and Hutten, Præf. Neminis.

† "*Omnino fervebat opus*," says Cruciger, "*et deserebantur tractationes*

as "preachers of perversion," and "winnowers of the devil's chaff." * Conradus Celtes, Hermannus Buschius, and Joannes Rhagius Æsticampianus (Sommerfeld), were successively expelled from Leipsic; † other universities emulated the example. The great University of Cologne stood, however, "proudly eminent" in its hostility to the new intelligence; for improvement was there opposed by the united influence of the Monks and Masters. When

prioris doctrinæ atque ftilis, et nitor elegantiaque disciplinæ politioris expetebantur. Tunc Lipsiam Ricardus Crocus, Britannus, qui in Gallia auditor fuerat Hieronymi Alexandri [Aleandri], venit, anno Chr. MDXV [MDXIV], professusque doctrinam Græcarum litterarum, omnium amorem favoremque statim est maximum consecutus: quod hujus linguæ non primordia, ut aliqui ante ipsum, sed integram atque plenam scientiam illius affere, et posse hanc totam explicare, docereque videretur. Negabat meus pater, credibile nunc esse id, quod ipse tunc cognoverit. Tanquam *calitus demissum* † *Crocum omnes veneratos esse* aiebat, unumquemque se felicem judicasse, si in familiaritatem ipsius insinaretur: docenti vero et mercedem, quæ postularetur, persolvere; et quocumque loco temporeque præsto esse, recusavisse neminem; se concubia nocte se conveniri, si quamvis longe extra oppidum inisset, omnes libenter obsecuti fuissent." (Loc. Comm.) (Among the Declarations of Melanchthon, see Oratio de Initiis, &c. and Oratio de Vita Trocedorfii; see also Camcrarius, (the pupil of Croke,) in the Preface to his Herodotus, and in his Life of Melanchthon.) Dr Croke (afterwards an agent of Henry VIII. in the affair of the divorce, and Public Orator of Cambridge) was the first Professor of Greek in Leipsic, and the first author of a grammar of that language, published in Germany. He founded that school which, under his successor, Sir Godfrey Hermann, is now the chief fountain of Hellenic literature in Europe. His life ought to be written. Sir Alexander Croke, in his late splendid history of the family, has collected some circumstances concerning this distinguished scholar; but a great deal of interesting information still remains ungathered, among his own and the writings of his contemporaries. We could fill a page with mere references.

* *Buschii Vallum Humanitatis*, ed. Burckhardi, p. 15. In Leipsic, humane letters were styled by the theologicians, *Dæmonum cibus*,—*Dæmonum opsonium*,—*Ægyptia olla*,—*virulenta Ægyptiorum dapes*. (Panegyricum Lipsiensis Theologi.—Præf. Lipsiæ, 1514.)

† We have before us an oration of Æsticampianus, delivered in 1511, on his departure from Leipsic, after the *public schools* had been closed against him by the faculty of arts. We extract one passage—"Quem enim poetarum eloquentium non sunt persecuti patres vestri, et quem vos ludibrio non habuistis, qui ad vos expoliendos, quasi *calitus sunt demissi*? Nam, ut multis paucos referam, Conradum Celten pene hostiliter expulistis; *Hermannum Buschium diu ac multum vexatum eiecistis*; Joannem quoque Æsticampianum variis machinis oppugnatum, tandem evertitis. Quis tandem Poetarum ad vos veniet? Nemo, herele, nemo. Inculti ergo jejuni que vivetis, fœdi animis et inglorii, qui, nisi poenitentiam egeritis, *damnati omnes immoriemini*."

Von Lange commenced his reformation of the school of Munster, a vehement remonstrance was transmitted from the faculties of Cologne to the bishop and chapter of that see, reprobating the projected change in the schoolbooks hitherto in use, and remonstrating against the introduction of pagan authors into the course of juvenile instruction. Foiled in this attempt, the obscurants of that venerable seminary resisted only the more strenuously every effort at a reform within Cologne itself. They oppressed and relegated, one after another, Bartholomæus Coloniensis, the two *Ædicollii* (Joannes and Serratus), Joannes Murmellius, Joannes Cæsarius, and Hermannus Buschius, as dangerous innovators, who corrupted the minds of youth by mythological fancies, and the study of unchristian authors. Supported, however, by Count Nuenar, dean of the canonical chapter, and the influence of his own rank, Buschius, a nobleman by birth, the scholar of Hegius, and friend and schoolfellow of Erasmus, stood his ground even in Cologne, against the scholastic zealots; and, though thrice compelled to abandon the field of contest, he finally succeeded in discomfiting, even in their firmest stronghold, the enemies of light. Pliny and Ovid were read along with Boethius and Sedulius; the ancient schoolbooks—the *Doctrinale* of Alexander, the *Disciplina Scholarum*, the *Catholicon*, the *Mammotrectus*, (*Mammætractus* is the best interpretation,) the *Gemma Gemmarum*, the *Labyrinthus*, the *Dormisecure*, the *Huguicio*, the *Ex quo*, the *Breviloquium*, the *Vade mecum*, the *Rapiamus totum*, &c. &c., were at last no longer, even in Cologne, recognised as of exclusive authority; and, within a few years after their disgrace in this fastness of prescriptive barbarism, they were exploded from all the schools and universities throughout the empire. In this difficult exploit Buschius was aided by Erasmus, Hutten, Molanchthon, Torrentinus, Bebelius, Simler, &c.

This was, however, but a skirmish, compared with another kindred and simultaneous contest; and the obstinacy of Buschius, in defence of classical Latinity, only exasperated the theologians of Cologne to put forth all their strength in opposition to Reuchlin, a still more influential champion of illumination, and in suppression of the more obnoxious study of Hebrew.

The character of REUCHLIN is one of the most remarkable in that remarkable age; for it exhibits, in the highest perfection, a combination of qualities which are in general found incompatible. At once a man of the world and of books, he excelled equally in

practice and speculation; was a statesman and a philosopher, a jurist and a divine. Nobles, and princes, and emperors, honoured him with their favour, and employed him in their most difficult affairs; while the learned throughout Europe looked up to him as the "trilingue miraculum," the "phœnix litterarum," the "eruditorum ἀλφω." In Italy, native Romans listened with pleasure to his Latin declamation; and he compelled the jealous Greeks to acknowledge that "Greece had overflowed the Alps." Of his countrymen, he was the first to introduce the study of ancient literature into the German Universities; the first who opened the gates of the east, unsealed the word of God, and unveiled the sanctuary of Hebrew wisdom. Agricola was the only German of the fifteenth century who approached him in depth of classical erudition; and it was not till after the commencement of the sixteenth, that Erasmus rose to divide with him the admiration of the learned. As an Oriental scholar, Reuchlin died without a rival. Cardinal Fisher, who "almost adored his name," made a pilgrimage from England, for the sole purpose of visiting the object of his worship; and that great divine candidly confesses to Erasmus, that he regarded Reuchlin as "bearing off from all men the palm of knowledge, especially in what pertained to the hidden matters of religion and philosophy." At the period of which we speak, Reuchlin, withdrawn from academical tuition to the conduct of political affairs, was not, however, unemployed in peaceably promoting by his writings the cause of letters; when suddenly he found himself, in the decline of life, the victim of a formidable persecution, which threatened ruin to himself, and proscription to his favourite pursuits.

The alarming progress of the new learning had at last convinced the theologians and philosophers of the old leaven, that their credit was only to be restored by a desperate and combined effort,—not against the partisans, but against the leaders of the literary reformation. "The two eyes of Germany" were to be extinguished; and the theologians of Cologne undertook to deal with Reuchlin, while Erasmus was left to the mercies of their brethren of Louvain. The assailants pursued their end with obstinacy, if not with talent; that they did not succeed, showed that the spirit of the age had undergone a change,—a change which the persecutions themselves mainly contributed to accomplish.

It was imagined that Hebrew literature, and the influence of

Reuchlin, could not be more effectually suppressed, than by rendering both the objects of religious suspicion. In this attempt, the theologians of Cologne found an appropriate instrument in John Pfefferkorn, a Jew, who had taken refuge in Christianity from the punishment which his crimes had merited at the hands of his countrymen.* In the course of the years 1505 and 1509, four† treatises (three in Latin, one in German) were published under the name of the new convert; the scope of which was to represent the Jewish religion in the most odious light. The next step was to obtain from the Emperor an edict, commanding that all Hebrew books, with exception of the Bible, should be searched for, and burned, throughout the empire; on the ground, that the Jewish literature was nothing but a collection of libels on the character of Christ and Christianity. The cultivation of Hebrew learning would thus be rendered impossible, or at least discouraged; and, at the same time, it was probably expected that the Jews would bribe liberally to evade the execution of the decree. Maximilian was, in fact, weak or negligent enough to listen to the misrepresentation, and even to bestow on Pfefferkorn the powers necessary to carry the speculation into effect; but some informality having been discovered, in the terms of the commission, the Jews had interest to obtain a suspension of the order; and previous to its renewal, a mandate was issued, requiring, among other opinions, that of Reuchlin, as to the nature and contents of the Jewish writings. Of the referees, Reuchlin alone complied with the requisition. He reported, that to extirpate Hebrew literature in the mass, was not only unjust, but inexpedient; that a large proportion of the Rabbinic writings was not of a theological character at all, and consisted of works not only innocent, but highly useful; nay, that the religious

* Maius (in his *Vita Reuchlini*), Jacobus Thomasius (in the *Observationes Hallenses*), Dupin (in his *Nouvelle Bibliothèque des Auteurs Ecclesiastiques*), Basnage (in his *Histoire des Juifs*, tom. v., p. 2063), and many others, confounded this John Pfefferkorn with a relapsed Jew of the same name, who was burned for blasphemy at Halle in 1514. The *Epistolæ Obscurorum Virorum*, and the *Poemata* of Hutten, might have kept them right. Our John was living in 1521.

† These tracts are extremely rare. Meiners (to say nothing of Muench) was acquainted only with *three*. In our collection there is a *fourth*, entitled *Hostis Judaorum*, &c. with the *Epigramma Politum* of Ortuinus against the Jews, in the titlepage, which was reprinted in his *Lamentationes Obscurorum Virorum*.

books themselves, while not, in general, such as they had been malevolently represented, were of the greatest importance to Christianity, as furnishing, in fact, the strongest arguments in refutation of the doctrine they defended.

This was precisely what the obscurants of Cologne desired. Pfefferkorn, with their assistance, published, (1511,) under the name of *Handglass* (Handspiegel), a tract in which Reuchlin was held up to religious detestation, as the advocate of Jewish blasphemy, and as guilty of many serious errors in the faith. Reuchlin condescended to reply; and his *Eyeglass* (Augenspiegel) exposed the ignorance and falsehood of his contemptible adversary. The principals now found it necessary to come forward. *Arnold Tungern*, as Dean of the Theological Faculty of Cologne, undertook to sift the orthodoxy of the *Eyeglass*; forty-three propositions "*de Judaico favore nimis suspectæ*," were extracted and published; and Reuchlin summoned to an open recantation, (1512.) In his *Defensio contra calumniatores suos Colonienses*, (1513,) Reuchlin annihilated the accusation, and treated his accusers with the unmitigated severity which their malevolence and hypocrisy deserved. These were, *James Hoogstraten*, a man of no inconsiderable ability, and of extensive influence, as member of the Theological Faculty of Cologne, as Prior of the Dominican Convent in that city, and "*Inquisitor hæreticæ pravitatis*," for the dioceses of Cologne, Mentz, and Treves,—*Arnold of Tungern* (or *Luyd*), Dean of the Theological Faculty, and head of the Burse of St Lawrence,—and *Ortuinus Gratius* (*Ortwin von Graes*), a pupil of Hegius, and now a leading member of the Faculty of Arts, but a sycophant, who, in hopes of preferment, prostituted talents in subservience to the enemies of that learning in which he was himself no contemptible proficient.

Reuchlin was not ignorant of the enemies with whom he had to grapple. The *Odium Theologicum* has been always proverbial; the Dominicans were exasperated and leagued against him; no opposition had hitherto prevailed against that powerful order, who had recently crushed Joannes de Wesalia, for a similar offence, by a similar accusation; while a contemporary pope emphatically declared, that he would rather provoke the enmity of the most formidable sovereign, than offend even a single friar of those mendicant fraternities, who, under the mantle of humility, reigned omnipotent over the Christian world. Reuchlin wrote to his friends throughout Europe, entreating their protec-

tion and interest in obtaining for him new allies. He received from all quarters the warmest assurances of sympathy and co-operation. Not only in Germany, but in Italy, France, and England, a confederation was organized between the friends of humane learning.* The cause of Reuchlin became the cause of letters; Europe was divided into two hostile parties; the powers of light stood marshalled against the powers of darkness. So decisive was this struggle regarded for the interests of literature, that the friends of illumination saw, in its unexpected issue, the special providence of God;† and so immediate were its consequences in preparing the religious reformation, that Luther (Dec. 1518) acknowledges to Reuchlin, that "*he only followed in his steps,—only consummated his victory, with inferior strength, indeed, but not inferior courage, in breaking the teeth of the Behemoth.*"‡ It was this contest, indeed, which first proved that the nations were awake, and public opinion again the paramount tribunal. In this tribunal the cause of Reuchlin was in reality decided, and his triumph had been long complete before it was formally ratified by a papal sentence. Reuchlin's victory, in public opinion, was accomplished by a satire; of which, the anathema on its publication by the holy see, only gave intensity to the effect.—But to return.

Hoogstraten now cited Reuchlin before the court of Inquisition at Mentz, (1513.) Reuchlin declined Hoogstraten as a judge; he was his personal enemy, and not his provincial; and when these objections were overruled he appealed to the Pope. This appeal, notwithstanding, and in contempt of a sist on the proceedings by the Elector of Mentz, Hoogstraten and his theological brethren of Cologne condemned, and publicly burned the writings of Reuchlin, as "offensive, dangerous to religion, and savouring of heresy;" and to enhance the infamy, they obtained

* England, for example, sent to the "army of the Reuchlinists," *More, Fisher, Lynacre, Grocyn, Colet, Latimer, Tunstall, and Ammonius* of Lucca; "omnes," says Erasmus to Reuchlin, "*Græce docti præter Coletum*; (but as we know from Erasmus, Colet soon made of that language an assiduous study.) (Epist. iii. Vir. ad Reuchl. L. II. sig. Ti.) We may notice that this rare and interesting collection has *five letters* of Erasmus, not to be found in any edition of his works.

† Jo. Cæsarius (Ep. ad Reuchl. Lib. II. sig. X. iii.) and Crotus Rubianus (ibid. Z. i.) [See Reuchlin's letter at the end of this article.]

‡ Epist. ad Reuchl. Lib. II. sig. C. iii. [and in De Wette's *Luther's Briefe*, i. 196.]

from the Sorbonne of Paris, and the Theological Faculties of Mentz, Erfurth, and Louvain, an approval of the sentence. Their triumph was wild and clamorous, but it was brief. On Reuchlin's appeal, the Pope had delegated the investigation to the Bishop of Spire; and that prelate, without regard to the determinations of the reverend faculties, decided summarily in favour of Reuchlin, and condemned Hoogstraten in the costs of process, (1514.) It was now the Inquisitor's turn to appeal; [but Reuchlin likewise cited him to Rome.*] The cause was referred by Leo to a body of commissioners in Rome; and Hoogstraten, amply furnished with money, proceeded to that capital. The process thus protracted, every mean was employed by the Dominicans to secure a victory. In Rome, they assailed the judges with bribes and intimidation. In Gormany, they vented their malice, and endeavoured to promote their cause by caricatures and libels, among which last the *Tocsin* (Sturm-glock,) ostensibly by Pfefferkorn, was conspicuous; while the pulpits resounded with calumnies against their victim.

Amid this impotent discharge of squibs, there was launched, from an unknown hand, a pasquil against the persecutors of Reuchlin. It fell among them like a bomb, scattering dismay and ruin in its explosion. This tremendous satire was the "*Epistolæ Obscurorum Virorum ad venerabilem virum Magistrum Ortuinum Gratium.*" Its purport is as follows:—

Before the commencement of his persecution, Reuchlin had published a volume of letters from his correspondents; and Reuchlin's enemy, Ortuinus, is now, in like manner, supposed to print a volume of the epistles addressed to him by friends of his. But whilst the correspondents of Ortuinus were, of course, any thing but less distinguished than those of Reuchlin, the former is supposed to entitle his collection—"Epistolæ Obscurorum Virorum ad Ortuinum," in modest ridicule of the arrogance of the "*Epistolæ Illustrum Virorum ad Reuchlinum, virum nostra ætate doctissimum.*"† The plan of the satire is thus extremely simple:—to make the enemies of Reuchlin and of polite letters represent

* [See the letter of Reuchlin (now printed for the first time) at the end of the article.]

† See *E. O. V.* Vol. II. Ep. 1. Dr Muench is wrong in supposing that "*Epistolæ Obscurorum Virorum,*" means "*Briefe der Finstertinge.*" The original title does not sufficiently conceal the satire; the translated openly declares it.

themselves; and the representation is managed with a truth of nature, only equalled by the absurdity of the postures in which the actors are exhibited. "*Barbare ridentur barbari*," say Hutten himself and Erasmus of the Epistles: and never, certainly, were unconscious barbarism, self-glorious ignorance, intolerant stupidity, and sanctimonious immorality, so ludicrously delineated; never, certainly, did delineation less betray the artifice of ridicule. The *Epistolæ Obscurorum Virorum* are at once the most cruel and the most natural of satires; and as such, they were the most effective. They converted the tragedy of Reuchlin's persecution into a farce; annihilated in public consideration the enemies of intellectual improvement; determined a radical reform in the German universities; and even the associates of Luther, in Luther's lifetime, acknowledged that no other writing had contributed so powerfully to prepare the downfall of the papal domination.* "*Veritas non est de ratione faceti*;" but never was argument more conducive to the interest of truth.

Morally considered, indeed, this satire is an atrocious libel, which can only be palliated on the plea of retaliation, necessity, the importance of the end, and the consuetude of the times. Its victims are treated like vermin; hunted without law, and exterminated without mercy. What truth there may be in the wicked scandal it retails, we are now unable to determine.

Critically considered, its representations may, to a mere modern reader, appear to sacrifice verisimilitude to effect. But by those who can place themselves on a level with the age in which the *Epistolæ* appeared, their ridicule (a few passages excepted) will not be thought to have overshot its aim. So truly, in fact, did it hit the mark, that the objects of the ridiculo themselves, with the exception of those who were necessarily in the secret, read the letters as the genuine product of their brethren, and even hailed the publication as highly conducive to the honour of scholasticism and monkery.

In 1516, immediately after the appearance of the first volume, thus writes *Sir Thomas More*:—" *Epistolæ Obscurorum Virorum operæ pretium est videre quantopere placent omnibus, et doctis joco, et indoctis serio, qui, dum ridemus, putant rideri stylum*

* "Nescio," says Justus Jonas, "an ullum hujus sæculi scriptum sic papistico regno nocuerit, sic omnia papistica ridicula reddiderit, ut hæc *Obscurorum Virorum Epistolæ*, quæ omnia, minima, maxima, clericorum vitia verterint in risum."—*Epist. Anonymi ad Crotum*.

tantum, quem illi non defendunt, sed gravitate sententiarum dicunt compensatum, et latere sub rudi vagina pulcherrimum gladium. Utinam fuisset inditus libello alius titulus! profecto intra centum annos homines studio stupidi non sensissent nasum quanquam rhinocerotico longiorem." (Erasmi Op. iii., p. 1575.)

"Pessime consuluit," says Erasmus in 1518, "rebus humanis, qui titulum indidit *Obscurorum Virorum*: quod ni titulus prodidisset lusum, et hodie passim legerentur illæ Epistolæ, tanquam in gratiam Prædicatorum scriptæ. Adest hic Lovanii, Magister Noster, pridem Prior apud Bruxellas, qui viginti libellos coemerat, gratificaturus amicis, paulo antequam Bulla illa prodiret, quæ effulminat eum libellum. Primum, optabam non editum, vorum ubi fuerat editus, optabam alium titulum."—And again, in a letter some ten years thereafter:—"Ubi primum exissent *Epistolæ Obscurorum Virorum* miro Monachorum applausu exceptæ sunt apud Britannos a Franciscanis ac Dominicanis, qui sibi persuadobant eas in Rouchlini contumeliam, et Monachorum favorem, serio proditas; quumque quidam egregie doctus, sed nasutissimus, fingeret se nonnihil offendi stylo, consolati sunt hominem:—'Ne spectaris,' inquit, 'ô bone, orationis eutem, sed sententiarum vim.' Nec hodie deprehendissent, ni quidam, addita epistola, lectorem admonuisset rem non esse seriam." (Erasmus probably refers to the penult letter of the second volume, in which Ortuinus is addressed as "*Omnium Barbarorum defensor, qui clamat more asinino*," &c.) "Post, in Brabantia, Prior quidam Dominicanus et Magister Noster, volens innotescere patribus, coemit accervum eorum libellorum, ut dono mitteret ordinis Proceribus, nihil dubitans quin in ordinis honorem fuissent scriptæ. Quis fungus possit esset stupidior!" (Ibid. pp. 1678, 1110.)

"*Quis fungus possit esse stupidior!*"—Erasmus would have wondered less at the stupidity of the sufferers, and more, perhaps, at the dexterity of the executioner, could he have foreseen, that one of the most learned scholars of England, and he the most learned of her bibliographers, should have actually *republished* these letters as a serious work; * and that one of our wittiest satirists should have *reviewed* that publication, without a suspicion of

* A re-impression of this edition, and with the name of the same bookseller (Clements), appeared in 1742. We know not on what grounds Herr Elbert (the highest bibliographical authority certainly in Europe), asserts that this re-impression was, in reality, published in Switzerland. The paper and print seem decidedly English.

the lurking Momus. And what is almost equally astonishing, these absurdities have never been remarked.

In 1710, there was printed in London the most elegant edition that has yet appeared of the *Epistolæ Obscurorum Virorum*, which the editor, *Michael Maittaire*, seriously represents as the production of their ostensible authors, and with a simplicity worthy of the Obscure themselves, takes credit to himself for rescuing, as he imagines, from oblivion, so curious a specimen of conceited ignorance, and vain-glorious stupidity.—But what ensued was still more wonderful. The edition, Maittaire dedicates “*Isaaco Bickerstaff, Armigero, Magnæ Britanniae Censori*; and *Steele*, in a subsequent number of the *Tatler*, after acknowledging the compliment, thus notices the book itself:—“The purpose of the work is signified in the dedication, in very elegant language, and *fine railery*. (!) It seems this is a collection of letters, which some *profound blockheads*, who lived before our times, have *written in honour of each other*, and for their mutual information in each other’s absurdities. (!!) They are mostly of the *German nation*, whence, from time to time, inundations have flowed, more *pernicious to the learned world* than the swarms of Goths and Vandals to the politie. (!!!) It is, methinks, wonderful, that fellows could be *awake*, and *utter such incoherent conceptions*, and *converse with great gravity like learned men*, without the least taste of knowledge or good sense. It would have been an endless labour to have taken any other method of exposing such impertinencies, than by a *publication of their own works*, where you see their follies, *according to the ambition of such virtuosi*, in a *most correct edition*.” (!!!!) And so forth.—The monks are no marvel after this.

These letters have been always, however, a stumbling-block to our British divines, critics, and historians.

Knight, in his *Life of Erasmus*, knows nothing of the *Epistolæ*, and less than nothing of their authors.

Jortin has made as, with his talents, he could hardly fail to make, an amusing farrago out of the life and writings of Erasmus; though not even superficially versed in the literary history of the sixteenth century. Of the German language he knows nothing; knows nothing of the most necessary books. He rarely, in fact, ventures beyond the text of Erasmus and Le Clerc, without stumbling. He confesses to having seen only the *first* of the three volumes of Burekhard’s *Vita Hutteni*; nay that he obtained

Burigny's *Vie d'Erasmus*, only as he had finished his own. Altogether, Jortin was not in a position to judge aright the character of Erasmus; nor is he even on his guard against the selfishness, meanness, and timidity of that illustrious genius. Accordingly, all the unworthy falsehoods which Erasmus whispers about his former friend, are unsuspectingly retailed as truths; for Jortin was unaware even of the authors by whom these are exposed, and the reputation of Hutten vindicated. Of Hutten, indeed,—his character, genius, writings, and exploits,—he everywhere betrays the profoundest ignorance. Nor has he blundered less in regard to the *Epistolæ Obscurorum Virorum*, than in regard to their great author. The Jew, Pfefferkorn, he knows only as a writer against the *Epistolæ*, and knows not that these were written among others, against him. The *Epistolæ* themselves, which he could never have perused, but with which especially, as historian of Erasmus, he ought to have been familiar, he describes as “a piece of *harmless wit*.” Finally, in utter unacquaintance with the *Fasciculus* of Ortuinus, though himself an historian of the Church, and that remarkable source of ecclesiastical history, republished in England by an Anglican divine;—he conceives it to be only a collection of “*Epistolæ Clarorum Virorum*,” a counterpart and precursor, it would appear, to the *Epistolæ Obscurorum Virorum*, published twenty years before, confusing it probably with the “*Epistolæ Illustrum Virorum ad Reuchlinum*.”

A late accomplished author (*Lord Woodhouselee*), asserts, that the *Epistolæ* were written in imitation of Arias Montanus's version of the Bible. That learned Spaniard was born some ten years subsequent to the supposed parody of his *Interpretatio Literalis*.

The only other notice in English literature of this celebrated satire that occurs to us, is an article on the subject, which appeared a few years ago in the *Retrospective Review*. We recollect it only as a meagre and inaccurate compilation from the most superficial authorities.

No question in the history of letters has been more variously answered than that touching the conception and authorship of these celebrated epistles.—Reuchlin and Erasmus alone, have, for themselves, expressly denied the authorship; which has been otherwise attributed to an *individual*—to a *few*—and to *many*.

AN INDIVIDUAL.—Jovius, Valerius Andreas, Koch, Opmeer, Mains, Naude, Gehres, and others, hold *Reuchlin* himself to have

been sole author. Caspar Barthius, J. Thomasius, Tribbeckhovius, Morhoff, Loescher, Weislinger, and Schurzfleisch, attribute them more or less exclusively to *Hutten*. Du Pin gives them to *Reuchlin* or to *Hutten*. Justus Jonas, Olcarius, Kapp and Weller, assign them to *Crotus*. Some, as Sonleutner, have given them to *Eobanus Hessus*;—others to *Erasmus*;—and others to *Euricius Cordus*;—Goldastus, again, refers them to *Brussianus*;—and Gisbert Voetius to the poet-laureate *Glareanus*.

A FEW.—Gundling views *Reuchlin* as the exclusive writer of the first part, assisted by *Erasmus* and *Hutten* in the second.—In both volumes, *Hutten* has been regarded as the principal, *Crotus* as the assistant, by the *Unschuldige Nachrichten* of 1716, Veller, Meiners, Panzer, Lobstein, and Genthe.—But Duchat, C. G. Mueller and Erhard view *Crotus* as sole author of the first volume, and *Hutten*, perhaps *others*, as his coadjutors in the second.—*Angst*, as deviser of the whole, and exclusive writer of the first volume, and, with the aid of *Hutten*, *Crotus*, and *others*, as principal author of the second, has found an advocate in Mohnicke.—Finally, by some anonymous writers *Hutten* and *Eobanus* have been viewed as joint authors of both volumes.

MANY.—Hamelmann (followed by Reimann and Placcius), bestows the joint honour, among *others*, on Count Nuenar, *Hutten*, *Reuchlin*, and *Buschius*;—to whom Reichenberg adds *Erasmus*, and *Cæsarius*;—whilst Freitag divides it between *Crotus*, *Hutten*, *Buschius*, *Æsticampianus*, *Cæsarius*, *Reuchlin*, *Pirkheimer*, *Glandorpius*, and *Eobanus*.—Burekhard originally gave the authorship of the whole to *Hutten*, *Nuenar*, *Reuchlin*, *Buschius*, and *Cæsarius*, with *Stromer* and *Pirkheimer* as probable coadjutors; but after the publication of the “*Epistola Anonymi ad Crotum*” (and herein he is followed by Floegel), to *Hutten* and *Crotus*, as inventors and principal writers of both volumes, assisted by *Nuenar*, *Æsticampianus*, *Buschius*, *Cæsarius*, *Reuchlin*, *Pirkheimer*, and possibly *Eobanus*.—Burigny (with Revius?) makes *Hutten* the sole or principal author, if not assisted by *Reuchlin*, *Eobanus*, *Buschius*, *Cæsarius*, and *Nuenar*.—Niceron attributes them to *Hutten*, *Reuchlin*, *Nuenar*, *Crotus*, and *others*.—Neumannus and Stoll regard *Hutten* as the chief author, aided by various friends, among whom the former particularises *James Fuchs*.—By Meusel, *Crotus* is supposed to have conceived the plan, and, along with *Hutten*, to be the principal writer of the first part, not unaided, however, by *Buschius* and *Æsticampianus*; to the

composition of the second, *Nuenar*, *Pirkheimer*, *Fuchs*, and perhaps *others*, contributed their assistance.—Ruhkopf assumes as authors, *Reuchlin*, *Hutten*, *Eobanus*, *Cordus*, *Crotus*, *Buschius*, &c.—By Scheibe they are held to have been *Crotus*, *Hutten*, *Buschius*, *Nuenar*, *Pirkheimer*, and *others*.—Wachler holds *Crotus* to be the writer of the first volume, *Hutten* and *others* to be authors of the second.—Dr Muench, in his matured opinion, considers *Hutten* and *Crotus* as principals, assisted more or less by *Eobanus*, *Æsticampianus*, *Buschius*, *Cæsarius*, *Pirkheimer*, *Angst*, *Franz von Sickingen*, and *Fuchs*. Muench's unexclusive views have found favour with Mayerhoff and Eichstadt.—The former regards *Crotus* and *Angst*, exclusively of *Hutten*, as authors of the first book; and of the second, *Hutten*, *Buschius*, *Crotus*, *Pirkheimer*, perhaps also *Eobanus*, *Cæsarius*, *Angst*, *Fuchs*, *Æsticampianus*, and *Sickingen*.—The latter ascribes the authorship of the first book to *Crotus*, *Buschius*, and *Pirkheimer*; and of the second, along with these, to *Hutten*, *Eobanus*, *Angst*, *Sickingen*, and *others*.—To these he finally adds *Melanchthon*.

The preceding summary, which affords a far more complete enumeration than has yet been attempted of the various opinions on this question, shows how greatly any adequate criticism of the different hypotheses would exceed our limits:—if that indeed were worth while; for the fact of the variation is itself proof sufficient, that all opinion is as yet baseless conjecture. Our observations (*ἡμετέρας συλλογὰς*) shall only be in supplement to what is already known. Suffice it to say, that as yet there has been adduced no evidence of any weight to establish the co-operation of other writers in these letters, besides Ulrich von Hutten and Crotus Rubianus; and, independent of the general presumption against an extensive partnership, there is proof sufficient to exclude many of the most likely of those to whom the work has been attributed—in particular, Reuchlin, Erasmus, and Eobanus. We propose to show that HUTTEN, CROTUS, and BUSCHIUS are the *joint authors*; and this, in regard to the first and last, by evidence not hitherto discovered.

CROTUS.—The share of *Crotus* is, we conceive, sufficiently established by the anonymous letter addressed to him by a friend on his return to the Catholic Church; and this friend, there is every reason to believe, was Justus Jonas. Crotus and Hutten were bosom friends from almost childhood to death; and, as boys, they had fled together from the Monastery of Fulda

to the University of Cologne.—The co-operation of Crotus, we assume.

HUTTEN.—Doubts have been of late thrown on *Hutten's* participation, at least in the first volume of the *Epistolæ*, founded on his two letters to Richard Croke, discovered and published by C. G. Mueller in 1801. More might be added to what Dr Muench has acutely alleged in disproof of the inference which Mueller has deduced from these; * but we shall not pause to show that Hutten *could* have been a writer of the volume in question; we shall at once demonstrate that he *must*.

The middle term of our proof is the *Triumphus Capnionis*. This must, therefore, be vindicated to Hutten. Molnicke has, with considerable ingenuity, recently attempted to invalidate the grounds on which Hutten had been hitherto recognised as the author of this poem. Added, however, to the former evidence, the proof which we shall now adduce appears to us decisivo in favour of the old opinion.—A letter of Erasmus to Count Nuenar, in August 1517, to say nothing of the twenty-fifth letter of the first volume of the *Epistolæ Obscurorum Virorum*, proves that the *Triumphus Capnionis* was ready for publication *two years before*, and that at his instance it had been then suppressed. In point of fact, it was only printed in 1519. This being understood, the following coincidence of thought and expression between letters of Hutten, all written one, two, or three years before the publication of the *Triumphus*, and the *Triumphus* itself, can be rationally explained only on the hypothesis that both were the productions of the same mind.

In the Letter to Nuenar, April 1518, speaking of the *Dominicans*, and their persecution of true learning and religion, Hutten says :—"Quodsi me audiat Germania, quanquam inferre *Turcis* bellum necesse est hoc tempore, prius tamen huic intestino malo remedium opponere quam de Asiatica expeditione cogitare iussero," etc.; then *immediately follows* a mention of the famous imposture of the Dominicans of Berne, which he calls the "*Ber-*

* For example :—Mueller (with Boehmius—indeed, with all others, as to the former,) is wrong in regard to *two* essential points.—1°, Croke did not first come to Leipsic in 1515. "Croesus regnat in Academia Lipsiensi, publice docens Græcas literas," says Erasmus in a letter to Linacer, of June 1514. (Op. t. iii. p. 136.)—2°, The first edition of the Erasmian Testament appeared in March 1516 (Wetstein Proleg.), and the Letter of Erasmus to Leo. X., relative thereto, is Aug. 1515, not 1516, as alleged by Mueller.

nense *Scelus*." In the Preface of the Triumphus, on the other hand, immediately after noticing, in the same words, the "*Bernense Scelus*," the author adds, in reference also to the *Dominicans* and their hostility to polite letters and rational theology, "Quippe *Turcos* nego, aut ardentiori dignos odio, aut majori oppugnandos opere," etc.—Again, in the same Letter, Hutten writes:—"In *Italia* certe nostri me pudit, quoties de Capnionis afflictione, orto eum *Italis* sermone, illi perecontarentur, tantum licet in *Germania* fratribus?" In the Preface to the Triumphus, the author says:—"Memini opprobratam nobis in *Italia* hominis (Hogostrati sc.) insolentiam. Tantum, inquit aliquis, licet in *Germania* fratribus?"—Again, in the same Letter, Peter Mayer and Bartholomew Zehender, are vituperated in conjunction: so also in the Triumphus.—Again, in the Letter it is said:—"Petrus Mayer indoctissimus...audax tamen." In the Triumphus, the marginal title is "*Petrus Mayer indoctissimus*," and in the text "nemo est ex vulgo indoctior ipso, Audax nemo magis," (v. 824.)—Again, in the Letter, it is said of "*Bartholomæus qui Decimator*," "simile quid scorpionibus habet." In the Triumphus "*Bartholomæus Zehender qui et Decimator*," as he is styled in the running title, is thus addressed in the text, (v. 772,) "Mitte hue te *Vipera*."—Again, in his Letter to Gerbellius, August 1516, Hutten extols Reuchlin and Erasmus, "*per eos enim barbara esse desinit hæc natio (Germania sc.)* So in the Triumphus, (v. 964,) *Germania* lauds Reuchlin, *per te ne barbara dicar* Aut rudis effectum est."—Again, in the conclusion of Hutten's letter to Pirkheimer, (August 1518,) we find "*accipe laqueum, barbaries*," and in the address to the "*Theologistæ*," closing the Triumphus, we have "*proinde laqueum sumite*," and "*obscuris viris laqueum præbens*;" while in both, this expression follows an animated picture of the rapid progress of polite literature. In like manner, compare what is said in Hutten's Letter to Croke, August 1516, "*Sententia non jam de Capnione, sed de nostris communibus studiis lata*," with the text of the Triumphus, (too long to quote,) of which the marginal summary is, "*Capnion communis libertatis assertor*," (v. 917.)—Also the same series of crimes is imputed to the Predicant Friars, and raked up, in the same manner, in Hutten's intercessio pro Capnione, and in two places of the Triumphus (v. 305, etc. and v. 400, etc.)—Though less remarkable, we may likewise adduce the expression, "*rumpantur ut ilia*," applied to the Friars, both in Hutten's Letter to Eras-

mus, (July 1517,) and Preface to the Nemo, and in the Triumphus, (v. 378.)—The "*Jacta est alea*," in the final address of the Triumphus, was subsequently Hutten's peculiar motto in his various polemical writings against the Court of Rome; as shortly before, it had been first adopted by him in his invectives against Duke Ulrich of Wirtemberg.—The occurrence also of the unusual proverbial allusion, "*herbam porrigens*," in Hutten's Preface to the Nemo, and "*herbam sumemus*," in the conclusion of the Triumphus, is not without its weight.—It may also be observed, that the author of the Triumphus and Hutten agree in always using the form *Capnion* and not *Capnio*, and in the employment (usque nauseam) of the terms *Theologistæ*, *Sophistæ*, *Curtisani*, &c.

[Since writing the above, I have met with the very highest testimony to Hutten's authorship of the Triumphus, by his friend Camerarius, in the life of his friend Melanehthon. The words are:—"Hujus (Hutteni sc.) est carmen triumphale victoriae Reuchlini cum pictura," &c. (Sub a. 1514.) All doubt becomes, in these circumstances, ridiculous; and I suppress other internal evidence, evidence which I am able to produce.]

Hutten, thus proved the author of the Triumphus Capnionis, is, by a similar comparison of that work with the Epistolæ Obscurorum Virorum, shown to be a writer of the first, no less than of the second, volume of these letters.—The Triumphus, be it remembered, was ready for publication before the *first* volume of the Epistolæ, in the twenty-fifth letter of which it is, indeed, spoken of as already written. Thus, no allusion occurs in the Triumphus to the Epistolæ; but the expression, *obscuri viri*, in the peculiar signification of the Epistolæ, which is employed at least five times in the Triumphus, argues strongly for the common origin of both. The following are, however, far more signal coincidences.—In the Triumphus, (v. 309, &cs.) speaking of the crimes of the Dominicans, the marginal title bears "*Henricus Imp. sacramento intorxicatus*." In the Epistolæ, (vol. I., ep. 35,) speaking, in like manner, of the crimes of the same order, Magister Lyra reports that it is written from Rome, that, as a punishment for their falsification of Reuchlin's *Eyeglass*, these friars are to be condemned to wear a pair of white spectacles on their black cowls, (in allusion to the name of that pamphlet, and on the titlepage of which a pair of large black spectacles appears,) "*sicut jam etiam debent pati unum scandalum in celebratione missali, propter intorxicationem alicujus Imperatoris*." The allu-

sion to the poisoning of Henry VII. in both, is remarkable; but the coincidence is carried to its climax, by the employment, in each, of so singular, and so unlikely a barbarism, (at least in the *Triumphus*) as *intoxicatus* and *intoxicatio*,—terms unknown even in the iron age of Latinity.—An equally striking conformity is found between a passage in the *Triumphus*, (v. 269—302,) where Hutten asserts, *firstly*, the superiority of Reuchlin's theological learning, as contrasted with that of his persecutors, and *secondly*, his equal participation with them in the gift of the Holy Spirit,—and a passage in the fifth letter of the first volume of the *Epistolæ*, in which the same attributes are affirmed of the same persons, in the same relation, and in the same consecution.—Hutten's co-operation in the first volume is thus evinced; and his co-operation there, to any extent, is proved by establishing his co-operation at all.

Hutten's participation in the *second* volume has been less disputed than his share in the first. Besides the evidence already stated by others, we may refer to the intended persecution of Erasmus for his edition of the New Testament, as stated in the letter of Hutten to Pirkheimer, from Bologna, June 1517, and in the forty-ninth letter of the second volume of the *Epistolæ*.—Also to the "*conjuratio*" and "*conjurati*" (a remarkable expression) in favour of Reuchlin against the theologians, in the address appended to the *Triumphus*, and in the ninth letter of the latter part of the *Epistolæ*.

The parallelisms we have hitherto adduced are sufficiently convincing in themselves; but they are far more conclusive when we consider;—1°, how narrow is the sphere within which they are found; and 2°, that similar repetitions are frequent in the undoubted works of Hutten.—As to the *former*; the letters of Hutten, belonging to the period, and the *Triumphus*, extend only to a few pages; and we defy any one to discover an equal number of equally signal coincidences (plagiarism apart) from the works of any two authors, allowing him to compare as many volumes as, in the present case, we have collated paragraphs.—As to the *latter*; nothing but a fear of trespassing on the patience of the reader prevents us from adducing the most ample evidence of the fact.

BUSCHIUS.—We now proceed to state the grounds on which we contend that there were *three* principal, or rather, perhaps, three exclusive, authors of the work in question; and that the celebrated

Hermann von dem Busche, or, as he is more familiarly known to scholars, *Hermannus Buschius*, completes, with Hutten and Cro-
tus, this memorable triumvirate.

Ortuinus Gratius, who may be allowed to have had a shrewd guess at his tormentors, not only in his *Lamentationes Virorum Obscurorum*,* immediately after the appearance of the *Epistolæ*, but, what has not been observed, twenty years thereafter in his *Fasciculus Rerum Expctendarum*,† asserts that the *Epistolæ* were the work of *several* authors, and states, even in the former, that *their names were known*.—Erasmus, who enjoyed the best opportunities of information,‡ and in circumstances under which it was no longer a point of delicacy to dissemble his knowledge, asserts

* P. 116, ed. 1649. It has been doubted whether Ortuinus be the real author of the *Lamentationes*, and whether that silly rejoinder be the work of an Anti-Renchlinist at all. The affirmative we could fully establish by passages from the works of Hutten and Erasmus which have been wholly overlooked;—but it is not worth while.

† T. I., p. 479, (Brown's edition.) Dr Muench and others conceive, that this work is palpably pseudonyms. He could hardly have read what Clement (*Bibl. Cur.* t. viii. p. 244, etc.) has said upon this subject; and in addition to the observations of that acute bibliographer we may notice, that the *Fasciculus* is not hostile to Catholicism; its purport is only to maintain that for which the Universities in general, and Paris and Cologne in particular, had always strenuously contended,—that a Council was paramount to the Pope, and that a council was the only mean, at that juncture, of reconciling the dissensions in religion. Ortuinus's zeal in the cause was probably any thing but allayed by the papal decision in the case of Renchlin. N.B. The marginal notes in the English edition are, for the greater part, by the *protestant* editor; an ignorance of this may have occasioned the misapprehension.

‡ He was the familiar friend of the whole circle of those who either wrote the work, or knew by whom it was written,—of Hutten, Crotus, Buschius, Nuenar, Cæsarius, Pirkheimer, Eobanus, Angst, Stromer, &c. Some of the *Epistolæ* were even communicated to him before publication, and the design and execution vehemently applauded. He himself expressly acknowledges one, attributed to Hutten; and Justus Jonas, his friend, asserts that they were copied by him, and dispatched to his correspondents, committed to memory, and recited in company. Nay, they are said to have cured an imposthume on his face by the laughter they excited. He was thus manifestly not only able to discover the history of the composition, but strongly interested in the discovery. The selfishness and caution of his own character are slyly hit off in the second volume—"Erasmus est homo pro se;" and we should be disposed to attribute the clamour of his subsequent disapprobation to personal pique, as much, at least, as to virtuous indignation, or even timidity.

that the authors of the *Epistolæ* were THREE. “*Equidem non ignorabam auctores. Nam tres fuisse ferebantur. In neminem derivavi suspicionem.*” * This testimony is at once the most cogent and most articulate that exists; so strong is it, that we at once accept it, even against the presumption that an effusion of so singular a character, of such uniform excellence, and rising so transcendently above the numerous attempts at imitation, could have emanated only from a single genius. To suppose the co-operation of a plurality of minds, each endowed with the rare ability necessary for such a work, is in itself improbable, and the improbability rises in a geometrical ratio to the number of such minds which the hypothesis assumes. In the present case, the weight of special evidence in favour of plurality is sufficient to counterbalance, to a certain extent, the general presumption in favour of unity. But gratuitously to postulate, as has been so frequently done, all and sundry not disinclined to Reuchlin, to have been able to write, and actually to have assisted in writing this masterpiece of wit, is of all absurdities the greatest. The law of parsimony is overcome by the irrecusable testimony of Ortuinus and Erasmus, so far as to compel us to admit a *plurality* of authors, and that to the amount of *three*; but philosophical presumption, and historical evidence, combine in exploding the supposition of a greater number.

Of these three authors, *two* are already found.—We could prove, we think, by exclusion, that no other, besides Buschius, was at all likely to have been the third. But as this negative would be tedious, we shall only attempt the positive, by showing that every circumstance concurs in pointing out that distinguished scholar as the colleague of Hutten and Crotus. The name of Buschius has once and again been mentioned, among the other wellwishers of Reuchlin, as a possible author of this satire; but whilst no evidence has yet been led, to show that his participation in that work was probable, grounds have been advanced, and still remain unanswered, which would prove this participation to have been impossible.

We must therefore refute, as a preliminary, this alleged impossibility.—“*Hamelmann,*” says Meiners, whose authority on this question is deservedly of the highest, “believes that Hormann Von dem Busche had a share in the *Epistolæ Obscurorum Viro- rum*. This supposition is contradicted by the chronology of these

* *Spongia adv. asp. Hutteni* (Opera, t. x. c. 1640, ed. Clerici.)

letters, which were written and printed previously to the return of Von dem Busche to Germany." * This objection, of which Muench was not aware, is established on Hamelmann's biography of Buschius; and, if true, it would be decisive. We can prove, however, that *Buschius was not only in Germany, but resident at Cologne for a considerable time previous to the printing of the first volume of the Epistolæ, and continued to reside there, until about the date of the publication of the second.*†—Buschius was teaching in the university of Cologne, soon after the publication of the *Prænotamenta* of Ortuinus, in 1514, as is proved by the letter of Magister Hipp, the 17th in the first volume of the *Epistolæ*. In the 19th letter of the second volume, Magister Schlauraff, at the commencement of his peregrination, leaves Buschius in Rostoch, but at its termination finds him teaching in Cologne; while the 46th of the same volume speaks of him as then (*i. e.* 1516) a rival of Ortuinus in that school. Glareanus in his *Epistlo* to Reuchlin, dated from Cologne, January 1514, speaks of Buschius as resident in that city. (*Ill. Vir. Ep. ad Reuchl. X. iii.*) The letter of Buschius himself to Reuchlin, written in *October*, "from his own house in Cologne," is checked by the events to which it alludes to the year 1515, (*Ibid Y i.*); and, finally, we find him addressing to Erasmus a poetical congratulation on his entry into that city in 1516, (*Erasmi Opera III. c. 198 and c. 1578, ed. Clerici.*) Buschius could not thus have left Cologne, before the middle or end of the year 1516, (his absontation at that juncture becomes significant;) and when recalled from England to Cologne in 1517, by Count Nuenar, Dean of the Canonical Chapter, that nobleman, with all his influence, was unable to support him against the hostility of the Monks and *Magistri Nostri*, Hoogstraten, Ortuinus & Co., to whom, if a known or suspected contributor to the *Epistolæ*, he would now have become more than ever obnoxious. Erasmus found him at Spire in 1518.—So far, therefore, from being placod beyond the sphere of co-operation during the concoction of the *Epistolæ*, he was *for the whole period at its very centre.*

* *Lebensbeschr. ber. Maenner*, II. p. 380.

† Meiners, it may be observed, makes the appearance of the first volume of the *Epistolæ* a year too late. This was in 1515, or, at latest, in the beginning of 1516; while the second volume was published towards the end of 1516, or early in 1517.

But his participation is not simply possible,—it is highly *probable*.

In the *first* place, his talents were not only of the highest order, and his command over the Latin tongue in all its applications almost unequalled, but his genius and character in strict analogy with the work in question. The *Epistolæ Obscurorum Virorum* are always bitterly satirical, and never scrupulously decent.* The writings of Buschius,—his *Cestrum*, his *Epistola pro Reuchlino*, his *Concio ad Clerum Coloniensem*, his *Vallum Humanitatis*, to say nothing of others,—are just a series of satires, and satires of precisely the same tendency as that *pasquil*. The *Vallum*, by which he is now best known to scholars, Erasmus prevailed on him to soften down; it still remains sufficiently caustic. His epigrams show that, in his writings, he did not pique himself on modesty; while the exhortation of the worthy Abbot Trithemius, “*ut ita viveret ne moribus destrueret eruditionem*,” proves that he was no rigorist in conduct.

In the *second* place, in *thus* maintaining the cause of Reuchlin he was most effectually maintaining his own.

In the *third* place, Ortuinus Gratius, to whom the *Epistolæ Virorum Obscurorum* are addressed, is the principal victim of this satire, though not a prominent enemy of Reuchlin,—far less of Hutton and Crotus. But he was the literary opponent, and personal foe of Buschius. Westphalians by birth, Ortuinus and Buschius were countrymen; they had also been schoolfellows at Dauter, under the celebrated Hegius. But as they were not allies, their early connexion made them only the more bitter adversaries. Buschius, the champion of scholastic reform, was opposed by Ortuinus, with no sincerity of conviction, but all the vehemence of personal animosity, in his endeavours to exterminate the ancient grammars, which, having for ages perpetuated barbarism in the schools and universities, were now loathed as philological abominations by the restorers of ancient learning.

* This excludes Eobanus Hessus, of whom we know from Erasmus, Joachim Camerarius, and Melchior Adamus, (to say nothing of the negative evidence of his own writings,) that he was morbidly averse from satire and obscenity. Muench, who comprises Eobanus (he has it uniformly Erban) in his all-comprehensive hypothesis of authorship, makes him writer of the tract *De Fide Meretricium*. He was not; and if he were, the author of that wretched twaddle was certainly no author of the *Epistolæ Obscurorum Virorum*.

Buschius had thus not only general reasons to condemn Ortuinius, as a renegade from the cause of illumination, but private motives to hate him as a hypocritical and malevolent enemy. The attack of Ortuinius is accordingly keenly retorted by Buschius in the preface to his second edition of *Donatus*, as it is also ridiculed in the 9th and 32d letters of the first volume of the *Epistolæ Obscurorum Virorum*.

In the *fourth* place, the scandal about the family and parentage of Ortuinius, (and he is the only one of the *Obscuro* whose birth is satirized,) seems to indicate the information of a countryman; and with every allowance for exaggeration, still even the contradictions of his sacerdotal filiation, which Ortuinius found it necessary to publish in his various works subsequent to the *Epistolæ*, preserve always a suspicious silence touching his mother.

In the *fifth* place, Buschius was the open and strenuous partisan of Reuchlin, in whose cause he published, along with Nuenar and Hutten, a truculent invective against the *Apologia* of Hoogstraten. He is always, indeed, found enumerated among the most active and prominent of the Reuchlinists. In evidence of this, we regret that we cannot quote from the *Epistolæ illustrium Virorum ad Reuchlinum*, the letters of Nuenar (T iii.), of Glareanus (X iii.), and of Eobanus (Y iii.), and from the *Epistolæ Obscurorum Virorum*, the 59th letter of the second volume; in all of which, the mention made of Buschius is on various accounts remarkable.

In the *sixth* place, Buschius was also the intimate friend of Crotus and Hutten; and among the letters to which we last referred, those of Nuenar and Eobanus significantly notice his co-operation in aid of Reuchlin with these indubitable authors of the work in question. His attachment to Hutten was so strong, that it lost him, in the end, the friendship of his schoolfellow Erasmus.

In the *seventh* place, Cologne and Leipsic are the universities prominently held up to ridicule throughout the *Epistolæ*. We see why, in the cause of Reuchlin, the *Magistri Nostri* of Cologne should be especial objects of attack;—but why those of Leipsic? Leipsic was not even one of the universities which had concurred with Cologne in condemning the *Augenspiegel* of Reuchlin. With the Leipsic regents, neither Hutten nor Crotus had any collision; nor, as far as we are aware, any intercourse. They are assailed.

however, with a perseverance and acrimony betraying personal rancour, and with a minuteness of information competent only to one who had been long resident among them. The problem is at once solved, if we admit the participation of Buschius. This scholar had grievous injuries to avengo, not only on the obscendants of Cologne, but on those of Leipsic. The influence of Hoogstraten, Tungern, and their adherents, had banished him from Cologne about the year 1500; and on both his subsequent returns to that university, he remained at open war with its Theologians and "Artists."* After his first expulsion from Cologne, he had, for six years, taught in Leipsic with the greatest reputation; but the jealousy of the barbarians being roused by the preponderance which he had given to the study of polite letters, he was constrained by their vexations to abandon that university in 1510, and the extrusion of his friend Æsticampianus was adjourned only until the following year. The letter of Magister Hipp, in the first volume of the *Epistolæ*, (Ep. 17,) in which the persecution of Æsticampianus by the Leipsic masters is minutely described, and that of Buschius wholly overpast, betrays the hand of Buschius himself. Throughout these letters, indeed, the notices of Von dem Busche, as of Hutten and Crotus, harmonize completely with the hypothesis of authorship.

But, in the *eighth* place, we are not altogether left to general probabilities. The single letter of Buschius to Reuchlin, compared with some of the *Epistolæ Obscurorum Virorum*, supplies conformities, that go far of themselves to establish an identity of authors. (Ep. ad Reuchl. L. ii. Y.) Among other parallelisms, compare, in the former, the threat of the Anti-Reuchlinists, in the event of the Pope deciding against them, to effect a schism in the Church, with the same in the 57th Epistle of the second volume of the latter;—their menace, in the former, of appealing to a Council, with the same in the 12th Epistle of the first volume of the latter; and their disparagement of the Pope, and a papal sentence, in the former, with the same in the 11th and 12th Epistles of the first volume of the latter.

We do not pretend that the circumstantial evidence now adduced amounts to absolute certainty. It affords, however, the

* How fond Buschius was of every joke against Hoogstraten, may be seen from his correspondence with Erasmus. (Erasmii Opera, t. iii. cc. 1682, 1683.)

highest probability; and is at least sufficient, in the present state of the question, to vindicate against every other competitor, the claim of Buschius to the third place in the triumvirate to whom the *Epistolæ Obscurorum Virorum* are to be ascribed.

It now remains to say a few words on Dr Muench's performances as editor.—A satisfactory edition of the *Epistolæ Obscurorum Virorum* required: 1°, A history of the circumstances which determined the appearance and character of the satire, including an inquiry into its authors; 2°, A critical discussion of the various editions of the work; 3°, A correct text founded on a collation of all the original editions, the omissions, interpolations, and variations of each being distinguished; and, 4°, A commentary on the frequent allusions to things and persons requiring explanation.

In regard to the *first* of these conditions, Dr Muench has added nothing,—and not a little was wanting. To explain the general relations of the satire, it was not sufficient to narrate the steps of the Reuchlinian process as an isolated event; nor in compiling this narrative (for it shows no original research), has he even copied his predecessors without inaccuracy. His disquisition touching the origin of the work, from his omission of all references, can only be understood by those who are already conversant with the discussion; his statement of the different opinions in regard to the authorship, is at second hand, and very incomplete; and his own hypothesis on the subject good for nothing.

In regard to the *second* condition, Dr Muench has committed a momentous blunder relative to the appendix of seven, or more properly six, letters which were added to the *third* edition of the first volume,—an edition which probably appeared within a year after the first edition of the first volume, and almost certainly before the publication of the second volume. With Panzer (whom he makes of *Leipsic*!) and Ebert,—nay, even with what he himself has transcribed from these bibliographers, before his eyes, his blunder is inconceivable. From a note to the first of these additional letters (p. 146), compared with his account of the fourth edition, that of 1556 (p. 70), he evidently imagines these six letters to have been first published and appended in that edition along with the *Epistola imperterriti Fratris*, &c. “The following letters,” he says, “are added only in the later editions, and their author, as well as the occasion of their composition, unknown. In all probability they were the work of the

still living authors of the first and *second* volumes."—Some lesser errors under this head we overpass, as Muench is here only a copyist.

The *third* condition, though of primary importance, and comparatively easy, our author has not fulfilled. He professes to have printed the first volume from its second edition; he does not inform us from what edition he printed the second volume, or the appendix to the first. He has instituted no collation of the original editions: and nothing can exceed the negligence, we shall not say ignorance, which even this uncollated text displays. It was the primary duty of an editor to have furnished a text, purified at least from the monstrous typographical errors with which all former editions abound. The present edition only adds new blunders to the old.* These errata we should refer to a culpable negligence, were it not that Dr Muench is occasionally guilty of blunders, which can only be explained by a defective scholarship, and an ignorance of literary history. Thus, in his introduction (pp. 55, 56), he repeatedly adduces a passage from one of Hutten's letters, beginning *rumpantur utilia*, though every schoolboy would at once read *rumpantur ut ilia*.

To the accomplishment of the *fourth* condition, Dr Muench has contributed little or nothing. No work more required, as none better deserved, a commentary, than the *Epistolæ*. Our editor has, however, attempted no illustration of the now obscure allusions with which they everywhere abound,—no difficult undertaking to one versed in the scholastic philosophy, and the general literature of the period; but the biographical notices he has ventured to append, of a very few of the persons mentioned in the text, significantly prove his utter incompetence to the task. These meagre notices are gleaned from the most vulgar sources, and one or two examples will afford a sufficient sample of their inaccuracy.

* Dipping here and there at random, we notice: p. 158, *Wesatio* for *Wesatio*, an old and important erratum; p. 192, *positionem* for *potionem*, old error; p. 132, *Stulteti* for *Sculteti*, ditto; p. 133, *succo taphaniana drachmas* lii., for *succo raphani ana drachmas* lii.; p. 88, *nostrum*. *Petrum* for *nostrum*, *P.*, old error; p. 98, *quot libeta* for *quodlibeta*; p. 138, *præputiati* for *non præputiati*; *ibid.*, *non præputiati* for *præputiati*, old error; p. 139, *fuit promotus* for *fui promotus*, old error; p. 203, *cum contra semel articulos habuit Petrum*, &c., for *c. h. s. a. c. P.*; p. 204, *parem* for *patrem*; p. 137, *indoricationem* for *intoxicationem*; pp. 162, 163, *solarium* for *salarium*, old error, &c. &c.

The celebrated poet, Joannes Baptista (*Hispaniolus*, Spagnoli) Mantuanus, General of the Carmelites, who died in March 1516,* he mistakes, and in the very face of the *Epistolæ*, for the obscure physician, Baptista *Fiera* (he writes it *Finra*) Mantuanus, who died at a much later period.

Every tyro in the literary history of the middle ages, and of the revival of letters, is familiar with the name, at least, of Alexander de Villa Dei or Dolensis, whose Latin Grammar, the *Doctrinale Puerorum*, reigned omnipotent throughout the schools of Europe, from the beginning of the 13th to the beginning of the 16th century. The struggle for its expulsion was one of the most prominent events in the history of the restoration of classical studies in Germany; and the *Epistolæ Obscurorum Virorum* are full of allusions to the contest. Yet Dr Muench knows nothing of Alexander. "*Gallus Alexander*," says he, "*as it appears*, an able grammarian of the *fifteenth* century, an experienced *casuist*," &c.—all utterly wrong, even to the name.

Of the notorious Wigand Wirt, Dr Muench states that he was one of the Dominicans executed at Berne, for the celebrated imposture, in 1509. Though probably the deviser of that fraud, he was not among its victims; and had Dr Muench read the *Epistolæ* he edits, with the least attention, he would have seen that Wigand is in them accused of being the real author of the *Sturm-glock*, (*Alarum*.) written against Reuchlin, in 1514, and that he is living in 1516. (Vol. I. App. Ep. 6.)

Our Editor confounds Bartholomew Zehender or Decinator of Mentz, with Bartholomæus Coloniensis of Minden. The former was one of the most ignorant and intolerant of the Anti-Reuchlinists; the latter, the scholar of Hegius, the friend of Erasmus, (who styles him, *vir eruditione singulari*.) and the ally of Buschius, Æsticampianus, and Cæsarius, had been banished from his native city, for his exertions in the cause of classical Latinity, by the persecutors of Reuchlin themselves.

What we have said will suffice to show that these letters still await their editor. Let the Germans beware. The work is of European interest; and, if they are not on the alert, the *Epistolæ*

* The allusion to the death of Mantuanus, in the twelfth letter of the second volume of the *Epistolæ*, thus checks, to a certain point, the date of its composition, and would prove that it was written in Italy, consequently by Hutten. This, which has not been observed, is important.

Obscurorum Virorum may, like the poems of Lotichius, find a foreign commentator.*

* Another edition of these Epistles, by Rotermund, we see announced in the Leipzig Mass-Catalogue for Easter 1830; and have been disappointed in not obtaining it for this article. The editor, whom we know only as author of the Supplement to Jocher's Biographical Lexicon, professes, in the title, to give merely a reprint of the London edition of 1710, (i. e. a text of no authority, and swarming with typographical blunders,) a preface explanatory of the origin of the satire, and biographical notices of the persons mentioned in it. As there seems no attempt at a commentary, we do not surmise that Rotermund has performed more in Latin, [but in German it is,] than Mnench in German; and the small price shows that there can be little added to the text.—[Having now seen this edition, the presumptive judgment need not be withdrawn.—The only other attempt at an illustration of this satire of which I am aware, since this article was written, is that of Professor Eichstadt, who, in 1831 and the following years, on academical occasions, published at Jena his Commentationes De Poesi Culinaria, of which I possess four. They are explanatory of the persons alluded to in one of the Epistles; to wit, the "Carmen Rithmicale Magistri Philippi Schlanraff, quod compilavit et comportavit, quando fuit Cursor in Theologia, et ambulavit per totam Almaniam superiorem."—Twenty years have now elapsed since the preceding article was written, and the Germans have not yet given to the world even a critical text of their great national satire.

Eobanus Hessus, referred to in note †, p. 216, is I see an error for *Crotus Rubianus*.—(This is now corrected.) But the *one* letter of *Eobanus* in the *Illustrium Virorum Epistolæ ad Reuchlinum*, (sig. Y. ii. sq.) is curious in itself; and still more, as it is *in answer* to the following letter of *Reuchlin*, the autograph of which came into my possession several years after the date of the preceding article, and now appears for the first time. This autograph is a good specimen of the calligraphy for which Reuchlin was noted; and of which a fac-simile is to be found, among others, in Efner's "Docteur Martin Luther," (ii. 205). This letter is of some historical importance.

"HELIO EOANO HESSO,

POLITIONIS LITERARÆ PRECEPTORI ERDIFORDLE, AMICO SUO QUAM
OBSERVANDISSIMO.—AD MANUS.

S. D. P. An tu non videas, Hesse, mecum simul, quam istæ crudeles picæ meudicæ, istæ Harpyiæ cyanoleucæ, (non illi Fratres Arvales qui Romuli ætate religiosi erant, sed hi Fratres Dominicales qui nostro ævo a religione labascunt,) indefessa bella gerant, ut mihi vix concedatur spirare ac aliquando vires resumere. Et tu moleste qnereris, me tuis ad me datis literis in hoc tam laborioso tempore nihil respondisse!

*Tristius haud illis monstrum, nec sævior ulla
Pestis.* [Virg.]

Quotidie calamum agitant meum, et mentem, pene defatigato mihi, allo impellunt, ut melioribus literis incumbere nequeam. Tu potes in Helicone

choreas ducere, Aseræoque ealamo imitari Musarum voluptates. At mihi non est integrum luter tot crabrones consusurrare, aut quippiam, vel serium et rigidius Catone, meditari. Ergo nisi te amem, inuidebo illi tuæ prosperitati, et mei miserebor: quod tu, princeps rei literariæ nobilissimus, carens æmulis; cum non modo tam illustres generosi animi tui conatus, quos in Heroidibus ostentas, verum etiam nomen ipsum tuum, tante majestatis signaculum, ad invidiam multos concitare debuerat, (ut est nunc hominum multorum conditio, senescente mundo). Ephesiis enim *Hessen*, idem quod *Rex* Latinis, dicitur, Callimæcho poeta Cyrenæo teste; qui Jovem, non sorte lectum esse Regem Deorum asserit, sed operibus manuum, in Hymno ad Jovem hoc utens carmine:—

Οὐ σὲ Θεὸν ἰσῆνα [vulgo, ἰσῆνα] πάλοι θύειν, ἔργα δὲ χεῖρῶν.

Ubi *Hessena* summum regem designat. [Chald. *Hasin*, potens.] Inter enim ætatis tuæ Christianos poetas, ipse Rex es; qui scribendis versibus, quodam potentatu et ingenii dominio emineuntiore, plus cæteris metro imperas, et syllabas quasque ad regulam regis. Gratulor itaque Universitati Erdifordiæ, quod te tali elarescent viro. Nec me in odium ejus, quominus de suo splendore ac laudis amplitudine gaudeam, nunquam concitabunt quidam, male de me homines meriti, terui habitantes; qui tametsi Theologiam profiteatur, tamen in condemnando mea, Dei vocem non sunt sequuti,—*Adam ubi es?* Ipsi autem illi inter peiores, non dico boni, sed minus mali fuerunt. Quanquam omnes, cum suis complicitibus, qui non vident trabem in oculo suo, expectabunt Dei judicium dicentis:—*In quo judicio judicaveritis, judicabimini; Nolite condemnare, et non condemnabimini.* Certum hoc est: non venit Deus. Tu vero, quauquam omnium bellorum exitus incerti sunt, tamen de mea causa spem tibi concipe, quod has volucres prorsus superabo. Sententiam diffinitivam cum executione obtinui. Sed adversarii, victoriam meam putantes revera suam iustitiam, omni diligentia invocaverunt Francorum Regem. Mirum, quod non [jam] Persarum summum item pontificem [atque] alios principes exorcisarunt, ut Sententiam Apostolicam labefactarent. Quapropter ego, licet victor, illos Romam citavi. Ut ab hoc exemplo discere potes! Unde panisper suspende chelyn, dum conelamatnm fuerit. Interea tamen, si me amas, adapta citharam et Musis materiam colliga.—Eque feliciter vale.

E Stutgardia, vii Kal. Novembres, Anno M.D.XIII.

JOANNES REUCHLIN PHORCEN. LL.D.

In fervente ad Vindictam Iambo, non eris solus neque alter."

Reuchlin's reference to the language of the Ephesians is explained by the *Etymologicon Magnum* (*sub voce*.)

Eobannus, in his answer, says, *inter alia*, that he had shown this letter to sundry good men in Erfurt, admirers of Reuchlin, and enemies of the hostile faction, and to some even of the Theological Faculty, (who had condemned the Eyeglass without interrogating its author.) "Sunt enim et hic quoque boni et mali; ipsi autem illi, quos tu, *non bonos, sed inter peiores minus malos*, appellas, pœnitere videntur, quod Colonensibus asiis et eir-

cumforaneis nugivendis ipsi decepti potius quam instructi, suffragium addiderunt."

Eobanus signalises "*Hutten, Buschius, and Crotus*," as the three *first* of the trumpeters of Reuchlin's victory.

(From Addenda to first edition.)—The preceding letter, though I always prized it as exceedingly curious, is, I find, far more curious than I had ever surmised — *Helius Eobanus Hessus* (to say nothing more of Reuchlin) is known to all versed in the history of the Restoration of Letters, and history of the Reformation of the Church, as one of the most remarkable characters of that remarkable period. He was the admired of Erasmus and of Luther, the bosom friend of Hutten, Crotus, Buschins, Melancthon, and Camerarius, indeed, more or less intimately connected with almost all the many men of note by whom Germany, during the first half of the sixteenth century, was so conspicuously illustrated. In an age—in a country where Latin so totally superseded the vernacular, Eobanus was *the Poet* of the Reformation, and, with Melancthon and Camerarius, its chief *Literator*. He is called by Erasmus the *Ovid*, by Camerarius the *Homer*, of Germany; and his translation of the Psalter was even more popular than his Homeric version, or his Ovidian imitations. Of his Psalms, there are known more than forty editions. As a poet, Eobanus remained during his life unapproached in Germany; and it was not till after his death, that Lotichius, and long after it, that Balde, came to share with, if not to wrest from, him the Elegiac and the Lyric laurels.

But why was he called THE KING?—In reading the Letters of Eobanus, of which we have two collections, by his two friends, Camerarius and Draco, in reading the Letters of his friends Camerarius and Melancthon,—and in reading the Life of Eobanus by Camerarius (to say nothing of the many subsequent biographers of the poet,) we encounter perpetual allusions to the title of King; the title, in fact, which Eobanus assumed himself, (but, in joke, as "*Rex Stultorum*,") and with which he was almost uniformly decorated by his more intimate correspondents. He sometimes dates his epistles, indeed, "*ex Regia Eggestosa*;" and his Queen, he once informs a correspondent, had ceased to amplify the royal family,—"*non quia vetula sit, sed quia nolit; dicit enim satis Regulorum*." The royal pair had only a single Princess (Reginula). Thus Luther, (in 1530,) sending to the poetic translator of the Psalms his own humbler prose German version of the cxviii., writes:—"Nam poetæ nolo illo modo comparari, sicut nec debeo nec possum. Tu enim rex poetarum, et poeta regum, scn, rectius dicam, regis poeta et poeticus rex es, qui regum illum poetam sic pulchre refers in peregrina sibi lingua." (De Wette, iv. 138.) Eobanus, too, had received the royal title long before he was recognised, in then tumultuous Germany, as the very Prince of Poets; his only rival in this supremacy being, as we are informed by Melancthon, the poet's patron and territorial liege-lord, the magnanimous Landgrave of Hesse. So much I knew.—A few days, however, after the preceding letter of Reuchlin had been printed, in looking for another matter, through the *Farragines Operum* of Eobanus, I stumbled on a poem, previously overlooked, articulately explaining the origin of the poet's regal style;

and found, that this same letter constituted the *very imperial patent of creation*, and was not, as I had deemed it, one merely among the many ordinary recognitions of his royal rank. I have likewise subsequently observed, that Camerarius in his *Life of Eobanus* (followed by Adamus and others,) attributes to Reuchlin the coronation of Eobanus.—Referring again to the letter of Eobanus in answer to Reuchlin's, I find the following allusion to the matter in question:—"Ego autem quod reliquum est, mi Reuchline, puto me tibi permagnam debere gratiam, et certe non fallor, quod genti meae tam antiquum, et quasi ex chao, attuleris præconium, et regem me, alludente voce gentilicia, salutas. Rex igitur sum ego, sed admodum parvo contentus regno. Quanto in asseris, id esset vel Imperatori nimium."—The verses (which here follow,) are from the second book of the *Sylvæ*; but though the *Farragines* were first published during the poet's life, (1539,) they are not in that edition, at least, accurately printed.

"CUR VOCETUR REX."

"NON ego crediderim citius, prodisse poetam
 Quem sterilis raptum prædicat Ascrea senem;
 Quam mihi jamdudum Phœbeia signa ferenti,
 Venit adoptato nomine *Regis* honor.
 Hoc tamen unde feram, qua manet origine nomen,
 Stultum et ridiculum dicere pene fuit.
 Scripsimus exiguo vulgata poemata versa,
 Scripta notis populo Lypsia clara dedit."
 Legerat hæc gentis Reuchlinus fama Suevæ,
 Et dixit:—"Regis nomen habere potes.
 Inter enim quoscunque ferunt tua secula vates,
 Rex es, et est ratio nominis inde tui:
 Nam Graii Regem dicunt *Hessena* poetæ,
 Esse ita te Regem, nomine reque doces;
 Et velut exerceas agnatum in carmina regnum,
 Recta stat in versu syllaba quæque tuo."†
 Hoc scriptum‡ excipiunt atque amplexantur amici,
 Et Regem clamant omnibus esse locis.
 Ipse ego quandoquidem nec publica scripta negare,
 Nec poteram charis obstruere ora viris:

* The first edition of the *Heroides Christianæ* was published at Leipsic, in 1514, Eobanus being then in his twenty-fifth year.—Does Eobanus in the first two verses refer to a recognition by him of Reuchlin's poetical genius in 1514? Reuchlin's *Scenica Progymnasmata* were republished, in that year, at Leipsic; and probably the letter of Eobanus to Reuchlin, to which the latter in his epistle here printed alludes, contained an acknowledgment to the effect, with special reference to that famous comedy. Reuchlin's coronation of Eobanus was thus only a reciprocity for Eobanus's laureation of Reuchlin.

† This is a very accurate abstract of Reuchlin's letter, here printed from the autograph, and for the first time.

‡ Thus in a *writing*, and not in conversation.

' Rex,' inquam, ' Rex vester ero, quando ista necesse est
 Tradita militiæ nomina ferre meæ.
 Verum alios titulos, nec inepta insignia sumam,
 Moria jamdudum cognita tota mihi est.*
 Vidimus Utopiæ latissima regna superbi.†
 Tecta Lucernarum sunt peragrata mihi.‡
 Fortunata meo lustrata est Insula cursu,
 Dulcia ubi æterno flumine mella fluunt.
 Qua vires ambrosiæ succus, qua rupibus altis
 Nectara, ut e cælo, præcipitata cadunt.§
 Gentis Hyperborææ felicem vidimus oram,
 Qua neque mors hominum nec mala fata premunt,
 Qua stant perpetuam facientia stagna juventam,
 Qua licet in cælum scandere quando libet.||
 Hæc per et hæc circum pulcherrima regna volentem,
 Moria me fida duxit amica manu;
 Cumque peragrârim tot tantaque regna, licebit
 Stultitiæ titulos sumere jure mihi.
 Musica legitimum sumant in carmina regnum,
 Qui sunt Mæonidæ, Virgiliique super;
 Quam mihi sint nullæ scribenda in carmina vires
 Sentio, et ingenium metior lude meum.
 Vos, quia me Regem facitis, sinite esse tyrannum,
 Stultitiæ haud aliud me diadema movet.
 Sic ego.—Paruerant illi tam vera monenti,
 Tradentes manibus Regia sceptrâ meis.
 Fecerit ergo licet Reuchlinia littera Regem,
 Non tamen hoc tantum contulit imperium.
 Plurima Capuioni subscribit turba :—Quid inde?
 Si rem complebant nomina, Cæsar ero."]

* Erasmus, by his *Encomium Moriæ*, had, in a certain sort, brought Folly into fashion.

† See the *Utopia* of Sir Thomas More.

‡ Lucian's *True History* (i. 29.) ?

§ The *Fortunate Islands*, or *Islands of the Blessed*, need no illustration.

|| He refers principally to Pindar, (*Pyth.* x. 57, sq.)

[*Note supplementary*, (1853).—I have spoken, towards the commencement of this article (p. 207), of the celebrated *Thomas à Kempis*, the commonly reputed author of the treatise—*De Imitatione Christi*; a book which, except the Bible, has been more frequently republished and translated than any other. The authorship of à Kempis has however been gravely doubted; and it is a famous bibliographical problem, whether he or Gerson, the illustrious Gallican divine, were the veritable writer of the work. But all doubt is now ended. The recent investigation of the oldest MSS. throughout Europe, has fully established the authenticity of the vulgar belief.]

II.—ON THE REVOLUTIONS OF MEDICINE.

IN REFERENCE TO CULLEN.*

(JULY, 1832.)

An Account of the Life, Lectures, and Writings of William Cullen, M.D., Professor of the Practice of Physic in the University of Edinburgh. By JOHN THOMSON, M.D., Professor of Medicine and General Pathology in the University of Edinburgh. Vol. I. 8vo. Edinburgh: 1832.

WE are much gratified by the appearance of the present work. Cullen is one of those illustrious minds by whom Scotland, during the past century, was raised from comparative insignificance to the very highest rank in literature and science. In no department of intellectual activity has Scotland been more prolific of distinguished talent, than in Medicine; and as a medical philosopher the name of Cullen stands, in his native country, pre-eminent and alone. It would be difficult indeed to find in any nation an individual who displayed a rarer assemblage of the highest qualities of a physician. The characters of his genius were prominent, but in just accordance with each other. His erudition was extensive, yet it never shackled the independent vigour of his mind; while, on the other hand, no love of originality made him overlook or disparage the labours of his predecessors. His capacity of speculation was strong, but counterbalanced by an equal power of observation; his imagination, though lively, was broken in as a useful auxiliary to a still more energetic reason.

* [This article, placed under the head of *Literature*, requires some indulgence; I could not give it a class for itself, and it falls at least more naturally under this, than under either of the other heads.]

The circumstances under which his mind was cultivated, were also conducive to its full and harmonious evolution. His education was left sufficiently to himself, to determine his faculties to a free and vigorous energy; sufficiently scholastic, to prevent a one-sided and exclusive development. It was also favourable to the same result, that from an early period of life, his activity was divided between practice, study, and teaching, while extended to almost every subject of medical science;—all however viewed in subordination to the great end of professional knowledge, *the cure of disease*.

Cullen's mind was essentially philosophic. Without neglecting observation, in which he was singularly acute, he devoted himself less to experiment than to arrangement and generalization. We are not aware, indeed, that he made the discovery of a single sensible phenomenon. Nor do we think less of him that he did not. Individual appearances are of interest only as they represent a general law. In physical science the discovery of new facts is open to every blockhead with patience, manual dexterity, and acute senses; it is less effectually promoted by genius than by co-operation, and more frequently the result of accident than of design. But what Cullen did, it required individual ability to do. It required, in its highest intensity, the highest faculty of mind,—that of tracing the analogy of unconnected observations, of evolving from the multitude of particular facts a common principle, the detection of which might recall them from confusion to system, from incomprehensibility to science. Of ten thousand physicians familiar with the same appearance as Cullen, is there one who could have turned these appearances to the same account? But though not an experimentalist, Cullen's philosophy was strictly a philosophy of experience. The only speculation he recognised as legitimate was induction. To him theory was only the expression of an universal fact; and in rising to this fact, no one, with equal consciousness of power, was ever more cautious in the different steps of his generalization.

Cullen's reputation, though high, has never been equal to his deserts. This is owing to a variety of causes. In medical science, a higher talent obtains perhaps a smaller recompense of popular applause than in any other department of knowledge. "*Dat Galenus opes*;" "the solid pudding," but not "the empty praise." Of all subjects of scientific interest, men in general

seem to have the weakest curiosity in regard to the functions of their own minds,—and even bodies. So is it now, and, however marvellous, so has it always been. “Eunt homines,” says St Austin, “mirari alta montium, ingentes fluctus maris, altissimos lapsus fluminum, oceani ambitum, et gyros siderum;—*seipsos relinquunt nec mirantur.*” For one amateur physiologist, we meet a hundred dilettanti chemists, and botanists, and mineralogists, and geologists. Even medical men themselves are, in general, equally careless and incompetent judges as the public at large, of all high accomplishment in their profession. Medicine, they cultivate not as a *science*, but as a *trade*; are indifferent to all that transcends the sphere of vulgar practice; and affect to despise what they are unable to appreciate. But independently of the general causes which have prevented Cullen from obtaining his due complement of fame, there are particular causes which conspired also to the same result. His doctrine was not always fully developed in his works; his opinions have been ignorantly misrepresented; his originality invidiously impugned; and what he taught in his lectures, published without acknowledgment by his pupils.

Cullen's honour thus calling for vindication, was long abandoned to neglect. This may be in part explained by the peculiar difficulty of the task. He who was competent to appreciate Cullen's merits, and to assert for him his proper place among medical reasoners, behoved to be at home in medicine, both as a practical art, and as a learned science,—he required at once experience, philosophy, and erudition. But this combination is now unfortunately rare: we could indeed with difficulty name a second individual so highly qualified for this duty as the accomplished physician on whom it has actually devolved. The experience of a long and extensive practice,—habits of thought trained in the best schools of philosophy,—an excursive learning which recalls the memory of a former age,—and withal an admiration of his subject, transmuting an arduous undertaking into a labour of love,—have enabled Dr Thomson, in his life of Cullen, to produce a work, which we have no hesitation in pronouncing the most important contribution from a British author to the history of medicine, since the commencement of our labours. Cullen's personal biography is comparatively meagre. His life is in his doctrine. But to exhibit this doctrine, as influenced by previous, and as influencing subsequent, speculation, was in a certain sort to exhibit

the general progress of medical science. In the execution of this part of his labour, Dr Thomson presents an honourable exception to the common character of our recent historians of medicine. He is no retailer of second-hand opinions; and his criticism of an author is uniformly the result of an original study of his works. Though the life of a physician, the interest of this biography is by no means merely professional. "The Philosopher," says Aristotle, "should end with medicine, the Physician commence with philosophy." But philosophy and medicine have been always too much viewed independently of each other, and their mutual influence has never been fairly taken into account in delineating the progress of either. The history of medicine is, in fact, a part, and a very important part, of the history of philosophy. Dr Thomson has wholly avoided this defect; and his general acquaintance with philosophical and medical opinions, renders the *Life of Cullen* a work of almost equal interest to liberal enquirers, and to the well educated practitioner.

William Cullen was born at Hamilton, in the year 1710. By his father, a writer (Anglicè, attorney) by profession, and factor to the Duke of Hamilton, he was sprung from a respectable line of ancestors, who had for several generations been proprietors of Saughs, a small estate in the parish of Bothwell; through his mother, he was descended from one of the most ancient families in the county of Lanark, the Robertsons of Ernock. Having completed his course of general education in the grammar school of his native town, and in the University of Glasgow, he was apprenticed to Mr John Paisley, a surgeon of extensive practice in that city. At this period, (that of Edinburgh recently excepted,) the Scottish Universities did not afford the means of medical instruction; and such an apprenticeship was then the usual and almost the only way in which the student of medicine could, in Scotland, acquire a knowledge of his profession. Having exhausted the opportunities of improvement which Glasgow supplied, Cullen, with the view of obtaining a professional appointment, went, in his twentieth year, to London. Through the interest of Commissioner Cleland, (Will Honeycomb of the *Spectator*,) probably his kinsman, he was appointed surgeon to a merchant vessel trading to the Spanish settlements in the West Indies, commanded by Captain Cleland of Auchinlee, a relation of his own. In this voyage he remained for six months at Porto Bello; thus enjoying an opportunity of studying the effects of a tropical climate on the constitu-

tion, and the endemic character of West Indian diseases. On his return to London, with the view of perfecting his knowledge of drugs, he attended for some time in the shop of Mr Murray, an eminent apothecary in the city. Two years (1732—1734) he spent in the family of Captain Cleland, at Auchinlee, in the parish of Shotts, wholly occupied in the study, and occasional practice, of his profession; and after a season devoted to the study of general literature and philosophy, under a dissenting clergyman of Rothbury in Northumberland, he completed his public education by attending for two seasons (1734—5, 1735—6) the medical classes in the University of Edinburgh.

"The foundation," says his biographer, "of a new and extended medical school had been laid a few years before this time in Edinburgh, by the appointment of Dr Monro to the Chair of Anatomy in the University, and by the judicious arrangements which that excellent anatomist and experienced surgeon afterwards made with Drs Rutherford, Sinclair, Innes and Plummer, for the regular and stated delivery of lectures on the different branches of medicine. Previously to this arrangement, almost the only regular lectures given upon any subjects connected with medicine in Edinburgh, were those which had been delivered in the Hall of the College of Surgeons, the chief medical school in that city, from the first institution of the College, in the year 1505, till the transference of the anatomical class into the University in 1725.

"Though scarcely ten years had elapsed from the first establishment of a regular school of medicine in the University of Edinburgh when Dr Cullen became a student there, the reputation of that school was beginning to be every where acknowledged, and had already attracted to it, not only a great portion of those who were preparing themselves for the profession of medicine in the British dominions, but many students from foreign universities." —P. 8.

At the age of twenty-six, Cullen commenced practice in his native town, and with the most flattering success. His dislike to surgery soon induced him to devolve that department of business upon a partuer; and for the last four years of his residence at Hamilton (having graduated at Glasgow), he practised only as a physician. Here he married Anna, daughter of the Reverend Mr Johnstone, minister of Kilbarchan; who brought him a large family, and formed the happiness of his domestic life for forty-six years. Here he also became the friend and medical preceptor of the late celebrated Dr William Hunter. Hunter had been educated for the church; but an intercourse with Cullen determined him to a change of profession. After residing for a time in family with his friend, it was agreed that he should go and prosecute his studies in Edinburgh and London, with the intention of ultimately

settling at Hamilton as Cullen's partner. This design was not, however, realized. Other prospects opened on the young anatomist while in London, and Cullen cordially concurred in an alteration of plan, which finally raised his pupil to a professional celebrity, different certainly, but not inferior to his own. Though thus cast at a distance from each other in after life, the friendship of these distinguished men continued to the last warm and uninterrupted.

Cullen, who, during his seven years' residence at Hamilton, had been sedulously qualifying himself for a higher sphere of activity, now removed to Glasgow. In the University of that city, with the exception of Anatomy, no lectures seem to have been previously delivered in any department of medicine. On his establishment in Glasgow, Cullen immediately commenced lecturer; and, by the concurrence of the medical professors, he was soon permitted to deliver, in the University, courses of the Theory and Practice of Physic, of Materia Medica, of Botany, and of Chemistry. In his lectures on Medicine, we find him maintaining in 1746, the same doctrines with regard to the theory of Fever, the Humoral Pathology, and the Nervous System, which he published in his writings thirty years thereafter.*

"In entering upon the duties of a teacher of medicine, Dr Cullen ventured to make another change in the established mode of instruction, by laying aside the use of the Latin language in the composition and delivery of his lectures. This was considered by many as a rash innovation; and some, desirous to detract from his reputation, or not sufficiently aware of the advantages attending this deviation from established practice, have insinuated that it was owing to Dr Cullen's imperfect knowledge of the Latin that he was induced to employ the English language. But how entirely groundless such an insinuation is, must be apparent to every one at all acquainted with his early education, course of studies, and habits of persevering industry. When we reflect, too, that it was through the medium of the Latin tongue that he must have acquired his extensive knowledge of medical science, it seems absurd to suppose that he was not qualified, like the other teachers of his time, to deliver, had he chosen it, his lectures in that language. We are not left, however, to conjecture with regard to this point; for that Dr Cullen

* Cullen, we see, is represented by French medical historians as "having taken Barthez for his guide." (Boisseau, in *Diet. des Sc. Méd.—Biogr.* t. iii. p. 363.) A chronological absurdity. Barthez was twenty-four years younger than Cullen; the latter had, in his lectures, taught his peculiar doctrines twenty-eight years before "his guide" was yet known to the world; and Cullen's *Institutions of Medicine* preceded the *Nova Doctrina de Functionibus* of Barthez by two, the *Nouveaux Elémens de la Science de l'Homme* by six years.

had been accustomed, from an early period of his life, to compose in Latin, appears not only from letters written by him in that language to some of his familiar friends, first draughts of which have been preserved, but also from the fact, that, whilst he taught medicine at Glasgow in his vernacular tongue, he delivered, during the same period, several courses of lectures on Botany in the Latin language. The notes of these lectures still remain among his papers; and I find also, written with his own hand, in the same language, two copies of an unfinished text-book on Chemistry. The numerous corrections of expression which are observable in the first sketches of Dr Cullen's Latin, as well as of his English compositions, show a constant attention on his part to the accuracy and purity of the language in which his ideas were expressed, and a mind always aiming, in whatever it engaged, at a degree of perfection higher than that which it conceived it had already attained." —P. 28.

An interesting account of these various courses, is given by Dr Thomson. In particular, justice is done to Cullen's extensive and original views in Chemistry; and a curious history is afforded of the progress of chemical lectures, both in this country and on the continent. In this science, Cullen, while lecturer in Glasgow, had the merit of training a pupil destined to advance it farther than himself; though, as Dr Thomson has shown, the germs of Black's theory of latent heat are to be found in the lectures of his preceptor. Cullen's fame rests, however, on another basis.

Cullen was thus the principal founder of the medical school of Glasgow, even before he was regularly attached to the University. In 1751, he was, however, admitted Professor of the Theory and Practice of Physic, and this a few days before the translation of Dr Adam Smith from the Chair of Logic to that of Moral Philosophy. On this occasion, Hume and Burke were unsuccessful candidates for the professorship vacated by Smith. With Smith and Hume, whose minds in many respects bore a strong analogy to his own, Cullen maintained a familiar intercourse during life; and their letters, now for the first time printed, form no unattractive portion of the present volume. A mutual interest in the application of chemistry to the arts, afforded also, about the same period, the first occasion of a correspondence between Cullen and Lord Kames, which soon ripened into an enduring friendship. The strength of his attachments is one of the most interesting features of Cullen's character. He seems never to have relinquished, never to have lost a friend; and the paternal interest he manifested in his pupils, secured to him their warmest affections in return.

Cullen had for some years contemplated a removal to Edinburgh,

before he accomplished his intention. At length, in 1755, on the decline of Dr Plummer's health, he was conjoined with that gentleman in the Chair of Chemistry in the University of Edinburgh, notwithstanding considerable opposition on the part of the other medical professors. During the ten years he retained this professorship, the number of his auditors continued steadily to increase; from under twenty, they rose to near a hundred and fifty. A translation of Van Swieten's Commentaries, which Cullen undertook at this juncture, was, like an earlier project of an edition of Sydenham's works, abandoned, in consequence of the extensive practice which he soon obtained. Nothing contributed more to the increase of his reputation than the Clinical lectures which he now regularly delivered. In reference to these, his biographer has furnished us with an interesting sketch of the rise and progress of clinical instruction in general. In 1760, during a vacancy in the Chair of Materia Medica, he delivered also, with great applause, a course of lectures on that subject: the notes of which, after being rapidly multiplied in manuscript for several years, were at length surreptitiously published in London.

The celebrity which Cullen had acquired as a teacher of medical practice, by his clinical lectures, and his course on the materia medica, had gained him not only great professional employment in Edinburgh, but numerous consultations from all parts of Scotland. He was now indeed generally regarded as the appropriate successor of Dr Rutherford in the Chair of Practical Medicine. Dr Rutherford had, however, imbibed prejudices against Cullen, which disposed him to resign in favour of Dr John Gregory of Aberdeen, a physician qualified in many respects to do high honour to the University, though Cullen's pretensions to the chair in question must be viewed as paramount to those of every other candidate. Cullen was unsuccessful; and so disgusted was he with his treatment on this occasion, that, on the death of Dr Whytt, in the following year (1766), he only consented to accept the Chair of the Theory of Physic, at the solicitation of his friends, and in order to leave a vacancy in that of Chemistry for Dr Black. So strong, however, was the general conviction of Cullen's pre-eminent qualifications as a teacher of the practice of medicine, that the desire was ardently and publicly expressed by students and professors, that he should be permitted to lecture on that subject. With this desire Dr Gregory liberally complied. Accordingly, from the year 1768, the two professors continued to give alternate

courses of the theory and practice of physic; and on the death of Gregory in 1773, Cullen was appointed sole professor of the practice. "Such were the difficulties to be overcome, and such the exertions required to procure, first a place in the University of Edinburgh, and afterwards the proper situation in it, for the man whose genius, talents and industry, shed such a lustre over the institution, and contributed in so remarkable a degree to extend and to perpetuate the fame of its Medical School!" With this period of Cullen's life, the present volume of his biography terminates.

To form an estimate of what Cullen effected in the improvement of Medical Science, it is necessary to premise a few remarks in regard to what it behoved him to accomplish.

If we take a general survey of medical opinions, we shall find that they are all either subordinate to, or coincident with, two grand theories. The one of these considers the solid constituents of the animal economy as the elementary vehicle of life, and consequently places in them the primary seat of disease. The other, on the contrary, sees in the humours the original realization of vitality; and these, as they determine the existence and quality of the secondary parts, or solids, contain, therefore, within themselves, the ultimate principle of the morbid affection. By relation to these theories, the history of medicine is divided into *three* great periods. During the *first*, the two theories, still crude, are not yet disentangled from each other; this period extends from the origin of medicine to the time of Galen. The *second* comprehends the reign of the Humoral Pathology—the interval between Galen and Frederic Hoffmann. In the *last*, the doctrine of the Living Solid is predominant; from Hoffmann it reaches to the present day.

In the medical doctrines of the first period, the two theories may be found partially developed. Sometimes Humorism, sometimes Solidism, seems to be favoured; neither, however, is ever generalized to the exclusion of the other; and the partisans of each may with almost equal facility adduce authorities from the schools of Cos and Gnidos, of Athens and Alexandria, in support of their favourite opinion.

By *Galen*, Humorism was first formally expounded, and reduced to a regular code of doctrine. Four elementary fluids, their relations, and changes, sufficed to explain the varieties of natural temperament, and the causes of disease; while the genius, eloquence,

and unbounded learning with which he illustrated this theory, mainly bestowed on it the ascendancy, which, without essential alteration, it retained from the conclusion of the second to the beginning of the eighteenth century. Galenism and Humorism are, in fact, convertible expressions. Not that this hypothesis during that long interval encountered no opposition. It met, certainly, with some partial contradiction among the Greek and Arabian physicians. After the restoration of learning, Fernelius and Brissot, Argenterius and Joubert, attacked it in different ways, and with different degrees of animosity; and while Humorism extended its influence by an amalgamation with the principles of the Chemic school, Solidism found favour with some of the Mathematical physicians, among whom Baglivi is deserving of especial mention. Until the epoch we have stated, the prevalence of the Humoral Pathology was, however, all but universal.

Nor was this doctrine merely an erroneous speculation; it exerted the most decisive, the most pernicious influence on practice.—The various diseased affections were denominated in accommodation to the theory. In place of saying, that a malady affected the liver, the peritonæum, or the organs of circulation, its seat was assumed in the blood, the bile, or the lymph. The morbid causes acted exclusively on the fluids; the food digested in the stomach, and converted into chyle, determined the qualities of the blood; and poisons operated through the corruption they thus effected in the vital humours. All symptoms were interpreted in blind subservience to the hypothesis; and those only attracted attention which the hypothesis seemed calculated to explain. The colour and consistence of the blood, mucus, feces, urine, and pus, were carefully studied. On the other hand, the phenomena of the solids, if not wholly overlooked, as were accidents, were slumped together under some collective name, and attached to the theory through a subsidiary hypothesis. By supposed changes in the humours, they explained the association and consecution of symptoms. Under the terms, *crudity*, *coction*, and *evacuation*, were designated the three principal periods of diseases, as dependent on an alteration of the *morbific matter*. In the first, this matter, in all its deleterious energy, had not yet undergone any change on the part of the organs; it was still *crude*. In the second, nature gradually resumed the ascendent; *coction* took place. In the third, the

peccant matter, now rendered mobile, was *evacuated* by urine, perspiration, dejection, &c., and æquilibrium restored. When no critical discharge was apparent, the morbid matter, it was supposed, had, after a suitable elaboration, been assimilated to the humours, and its deleterious character neutralized. Coction might be perfect or imperfect; and the transformation of one disease into another was lightly solved by the transport or emigration of the noxious humour. It was principally on the changes of the evacuated fluids that they founded their judgments respecting the nature, issue, and duration of diseases. The urine, in particular, supplied them with indications, to which they attached the greatest importance. Examinations of the dead body confirmed them in their notions. In the redness and tumefaction of inflamed parts, they beheld only a congestion of blood; and in dropsies, merely the dissolution of that fluid; tubercles were simply coagula of lymph; and other organic alterations, in general, naught but obstructions from an increased viscosity of the humours. The plan of cure was in unison with the rest of the hypothesis. Venesection was copiously employed to renew the blood, to attenuate its consistency, or to remove a part of the morbid matter with which it was impregnated; and cathartics, sudorifics, diuretics, were largely administered, with a similar intent. In a word, as *plethora* or *cacochymia* were the two great causes of disease, their whole therapeutic was directed to change the quantity or quality of the fluids. Nor was this murderous treatment limited to the actual period of disease. Seven or eight annual bleedings, and as many purgations,—such was the common regimen the theory prescribed to ensure continuance of health; and the twofold depletion, still customary, at spring and fall, among the peasantry of many European countries, is a remnant of the once universal practice. In Spain, every village has even now its *Sangrador*, whose only cast of surgery is blood-letting; and he is rarely idle. The medical treatment of Lewis XIII. may be quoted as a specimen of the humoral therapeutic. Within a single year this theory inflicted on that unfortunate monarch above a hundred cathartics, and more than forty bleedings.—During the fifteen centuries of Humorism, how many millions of lives did medicine cost mankind?

The establishment of a system founded on the correcter doctrine of Solidism, and purified from the crudities of the Iatro-mathematical and Iatro-chemical hypotheses, was reserved

for three celebrated physicians towards the commencement of the eighteenth century,—FREDERIC HOFFMANN,—GEORGE ERNEST STAHL, and HERMANN BOERHAAVE. The first and second of this triumvirate were born in the same year, were both pupils of Wedelius of Jena, and both professors, and rival professors, in the University of Halle; the third was eight years younger than his contemporaries, and long an ornament of the University of Leyden. The doctrines of these masters were in many respects widely different, and contributed in very different degrees to the subversion of the obnoxious hypotheses. This was more effectually accomplished by the two Germans, especially by Hoffmann; whereas many prejudices of the humoral pathology, of the mechanical and chemical theories, remained embalmed in the eclecticism of Boerhaave.

In estimating Cullen's merits as a medical philosopher, Dr Thomson was necessarily led to take a survey of the state of medical opinion, at the epoch when Cullen commenced his speculations :—

“ At the period when Dr Cullen first began to deliver lectures on medicine in Glasgow, there prevailed in the medical schools of Europe three great systems of physic, those of Stahl, Hoffmann, and Boerhaave,—teachers not less distinguished by their peculiar and original powers of intellect, than by their attainments in literature and philosophy, their proficiency in the mathematical and experimental sciences, and their extensive knowledge of theoretical and of practical medicine. The lectures and writings of these eminent men, besides affording useful summaries of all that was known in medicine before the beginning of the eighteenth century, laid open various new and interesting views of the animal economy. Stahl and Hoffmann, in particular, recognised more distinctly, and recommended more emphatically, than had been done by any of their predecessors, the study of the living powers, and the laws by which they are governed, as the proper and legitimate objects of medical investigation.

“ The ancient doctrines of the four elements and their corresponding temperaments—of the separate functions of the vegetative, sentient, and rational souls—and of the agency of the natural, vital, and animal spirits—had continued to be taught in the schools of medicine with very little variation, from the time of Galen till after the middle of the seventeenth century. It was, indeed, but a short time before Stahl, Hoffmann, and Boerhaave, began to lecture on medicine, that a solid foundation had been laid for the extension and improvement of medical science, by the introduction of the experimental and inductive method of prosecuting philosophical inquiries, so well explained and strenuously inculcated in the writings of Lord Bacon,—by the clear, precise, and logical distinction made by Descartes between mind and matter, as the respective subjects of properties essentially different from each other,—by the accurate analysis which had been given by Locke

of mind and its operations, in his Essay on the Human Understanding, and his recognition of sensation and reflection as distinct sources of knowledge,—by the discovery by Newton of the universal law by which the motions of masses of matter placed at sensible distances from one another are regulated, and his distinction of this class of motions from the chemical changes which the different species of matter produce upon one another when their minute particles are brought into immediate contact,—by the application (though at first necessarily imperfect, and in many respects erroneous) of the principles of natural philosophy and of chemistry to the investigation of the phenomena of the animal economy,—by the discovery of the circulation of the blood by Harvey, and of the absorbent system by Asellius and Pecquet,—by the minute examination of the structure, distribution, and functions of the nervous system by Willis, Vieussens, Baglivi, and others,—and by the development by Glisson of the contractile or irritable power inherent in muscular fibres, by the operation of which the various motions of the animal economy are performed ;—advances in knowledge all tending to facilitate the proper investigation of the vital susceptibilities and energies inherent in organised bodies, and of the operation of the external agents by which these susceptibilities and energies may be excited, modified, or destroyed.”—Pp. 162-3.

Stahl,—Hoffmann,—Boerhaave, are then passed in review ; their doctrines displayed in themselves, and in relation to other systems ; and subjected to an enlightened criticism. This analysis exhibits a rare command of medical and philosophical literature, strong powers of original speculation, and the caution of an experienced practitioner.

In discussing the *Animism* of Stahl, Dr Thomson takes a view of the various divisions of the soul and its faculties, adopted by the different schools of philosophy and medicine, from Hippocrates to Blumenbach ; and shows that the Stahlian theory, in rejecting the animal spirits of Galen and Descartes, with all mechanical and chemical explanations of the vital functions, and in attributing to the same soul the collective phenomena of life, from the purest energies of intelligence to the lowest movement of the animal organism, has more of apparent than of real novelty. It was the universal opinion of the ancient philosophers, that body was incapable of originating motion, and that self-activity was the essential attribute of an incorporeal principle or soul. But while thus at one in regard to the general condition of activity, (Aristotle's criticism of the *ἀνενκίνητος* of Plato is only verbal,) they differed widely as to this,—whether different kinds of energy, change, movement, were determined by the same, or by different souls. Plato's psychological trinity is clear ; but whether Aristotle, by his Vegetable, Animal, and Rational Souls, supposes three con-

centric potencies of the same principle, or three distinct principles, is not unambiguously stated by himself, and has been always a point mooted among his disciples. Stahl's doctrine is thus virtually identical with the opinion of that great body of Aristotelians, who, admitting the generic difference of function between the three souls, still maintain their hypostatic unity. In this doctrine, the vegetable, animal, and rational souls express only three of several relations of the same simple substance. We are not convinced, with Dr Thomson, that any thing is gained by limiting the term $\psi\upsilon\chi\acute{\alpha}$, or Soul, to the conscious mind. Many modern philosophers (as Leibnitz and, after Leibnitz, Kant,) do not, even in the cognitive faculties, restrict our mental activity to the sphere of consciousness, and this too for sufficient reasons; the phenomena of nutrition, growth, generation, &c., are as little explicable on merely chemical and mechanical principles, as those of sense, or even those of intelligence, and all seem equally dependent on certain conditions of the nervous system; the assumption of a double or triple principle is always hypothetical, and *Entia non sunt multiplicanda præter necessitatem*; while, at the same time, on any supposition, a generic expression is convenient, to denote the cause or causes of life in its lowest and in its highest gradations. We are unable, therefore, to coincide with Dr Thomson in his praise of Galen, for originating this innovation; more especially as it is sufficiently apparent, (however reserved his language may occasionally be), that in Galen's own theory of mind, the highest operations of intellect, and the lowest function of his unconscious Nature, are viewed as equally the reflex, and nothing but the reflex, of organization. With this qualification, we fully coincide in the following estimate of Stahl:—

"The simple and sublime conception, that all the motions of the human body are produced and governed by an intelligent principle inherent in it, was well calculated, by its novelty and by the easy and comprehensive generalization of vital phenomena which it seemed to afford, to excite and promote the speculative enquiries of medical philosophers, and to free the science of medicine from many of those erroneous and absurd mechanical and chemical doctrines with which in its progress it had become encumbered. But the adoption of this hypothesis led Stahl, in the framing of his system, to be too easily satisfied with the imperfect and erroneous physiological view which he had taken of the human economy,—to neglect the phenomena of life, as they present themselves in the nutrition and generation of plants and of irrational animals,—to content himself in accounting for the phenomena of the organic functions, with applying the term Rational Soul to the principle which had been, by almost all former physiologists, denominated the vegeta-

tive soul of nature; and almost wholly to omit in his view of the animal economy, the consideration of the peculiar and distinguishing susceptibilities and energies of the Nervous system. These errors and omissions prevented Stahl from perceiving the fixed boundary which has been established by nature between the operations of the material and mental faculties of our frame, in that consciousness of unity and personal identity, by which all the various modifications of sense, memory, intellect, and passion, appear to be constantly and inseparably accompanied; while, at the same time, his ambition to be the founder of a new sect in medicine, disposed him to be less just to the merits of his predecessors and contemporaries than is required of one who undertakes to make any addition to the opinions or to the experience of past ages.

"It is but just to Stahl, however, to acknowledge, that he had the merit of directing the attention of medical practitioners, in a more particular manner than had been done before his time, to that resistance to putrefaction which exists in the solid and fluid parts of the body during life,—to the vital activities by which the state of health is preserved, and its functions duly performed,—to the influence which the mind indirectly exercises over the different functions of the body—to the effects of the different passions in exciting diseases,—to the natural course of diseases,—and especially to those powers of the animal economy by which diseases are spontaneously cured or relieved."—Pp. 180, 181.

"*Medico, qua medicus, ignota est anima.*" Stahl may be reproached, that his medical theory was purely psychological, and that he suffered it to exert too dominant an influence on his practice. Confiding in the inherent wisdom of the vital principle, his medicine was, as he professed it to be, the "*Art of curing by expectation.*" Cullen's censure of Stahl's practice, as "proposing only inert and frivolous remedies," appears, however, to Dr Thomson too indiscriminating; "it being," as he well observes, "a matter of extreme difficulty to say at what point a cautious and prudent abstinence from interference passes into ignorant and careless negligence." *

* [Dr Thomson might, indeed, have stated this more strongly; and the statement would have been borne out, not by Stahl only, but by Hoffmann. In Hoffmann's dissertation "*On the Seven Rules of Health,*" the last and most important of these is:—"Fly the Doctors and the doctors' Drugs, as you wish to be well; (*Fuge Medicos et Medicamenta, si vis esse salvus*)"; and this precept of that great physician is inculcated by the most successful practitioners (or non-practitioners) of ancient and of modern times. Celsus well expresses it:—"Optima medicina est non ulla medicina;" and I have heard a most eminent physician candidly confess, "that the best practice was that which did nothing; the next best, that which did little." In truth, medicine, in the hands by which it is vulgarly dispensed, is a curse to humanity, rather than a blessing; and the most intelligent authorities of the pro-

Dr Thomson's account of *Hoffmann's* system is, however, still more interesting; this physician being the great founder of the

fession—"ἰατρὸς οὐ χαρίσταιται"—from Hippocrates downwards, agree that, on an average, their science is, in its practice, a nuisance, and "throw physic to the dogs." The Solidists, indeed, promptly admit, that the Humorists were homicides by wholesale for above fifteen centuries; while Homœopathy and the Water-cure are recoils against the murderous polypharmacy of the Solidists themselves. Priesnitz, I see, declares, that the most and the worst afflictions which "flesh is" not "heir to," but which water has to remedy, are "the Doctor and the Drugs." This is consolatory to the world at large; for if, as Charrou says, "we must all live and die on trust," so we must all live and die, *secundum artem*, on one medical system or another. The utmost we can do is, like Ajax, to die with our eyes open: for—

"Non vobis inter vos tantas compouere lites;"

"Who shall decide when doctors disagree?"

Has the *practice* of medicine made a single step since Hippocrates?

(1853.) The preceding note has offended some members of the profession; and in a Medical Journal, conducted by four of the Medical Faculty of the Edinburgh University, it is made an object of comment. Of course, any one is entitled publicly to animadvert on any published statement which he may deem untrue. All that can be required of an objector, is, that he should not *misrepresent* what he affects to redargue. But such has been here done. It is seen: 1^o, that I have spoken only historically; and 2^o, that I historically represented the judgment of the highest authorities in medical science and of the medical profession. What then will be thought of an attempt, not to refute, but to pervert my statements; in making the scepticism, which I record, touching medical practice, to be only my individual, my unprofessional, persuasion,—in itself, I admit, of no importance,—and not an opioulon, which, from the number and professional authority of its supporters, is of paramount importance? But this tactic, and this alone, is here and elsewhere employed. Here,—it is concealed, that those who are best entitled to express an authoritative judgment in regard to medical practice and medical practitioners, are precisely those who regard them in the most unfavourable light; whilst I, who have notoriously no title to be heard upon the question, except as a reporter, am represented, as dogmatical in the assertion, as original in the opinion, as singular in the paradox, nay, as one who would be "helleborised" as a madman, by Hippocrates, for harbouring the absurdity. We shall see.

And first, I will take the liberty of translating the two opening paragraphs of another dissertation by the great Hoffmann;—"On the Physician the cause of Disease." (I translate, I say, but trust, that Hoffmann's dicta may not again be invalidated, by attributing them to the reporter.)

§ 1. "There is, assuredly, no art in which application is so doubtful, in which practice is so perilous, as that proposing to preserve health, to prevent and remedy disease. And as there is no other more excellent, if employed aright, so none is more baneful, in rash and ignorant hands. Hence, it is truly lamentable, that so few are competently skilled in this divine art, while the number is endless of persons vulgarly illiterate and destitute of all solid

now dominant pathology of the Living Solid,—*Solidism*, a doctrine which it was Cullen's glory to adopt, to vindicate, and to

knowledge, who, for the sake of lucre, enter with reckless frivolity on its practice and profession. Of these Hippocrates (*De Arte* [Lex]) had long ago complained :—‘*There are MANY Physicians, in name and reputation ; FEW, in reality and effect.*’ ”

To pause :—Would Hippocrates then, have deemed it fit, to administer black belletore to one who, at worst, whispered, and that at second hand, *this same Hippocratic opinion* ? Is he who doubts the infallibility of this, that, and the other hostile medical system, insane ; or is Medicine itself, in general, not rather, like Party, “ the madness of many for the gain of a few ? ”—Hoffmann goes on :

§ 2. “ What, however, is a greater marvel ;—this art, so arduous and difficult, is commonly believed to be so obvious and easy, that there is no one who may not venture on its practice ; In so much, that not merely the simple multitude, but men, otherwise of prudence and of the higher orders of society, do not hesitate to stake the greatest of all earthly blessings—their Life, in reliance on any one professing his skill in the treatment of disease. Pliny, (xxix, 1.), and that right justly, inveighs against this pernicious confidence. ‘ In this art alone,’ he says, ‘ do we accord credit to each professing Physician, although in no falsehood is the peril greater.’ And after a word or two, he subjoins this reason :—‘ There is here, no law to punish ‘ murderous ignorance, no example of retribution [to deter]. They learn ‘ their craft by the experience of our dangers ; through our deaths do they ‘ carry on their experiments ; and it is the medical practitioner alone, who ‘ enjoys an absolute impunity for homicide.’ ”

Such is Hoffmann's opinion of medical practice, and Hoffmann was confessedly the most illustrious of modern physicians. He it was who exploded the theory of Humorism ; although he could not accomplish all he wished ; a return to the curative powers of nature—a return to what, after Aretæus, he calls “ the Art of God.” Cullen followed in his steps ; but the world was not yet ripe for the reform ; and Cullen accordingly threw out his “ Tub to the whale.” But the highest authorities in medical science, before, but especially since, the time of Hoffmann, have been the greatest sceptics in regard to the remedial efficacy of medicines ; and the most successful physicians, have been always those who guarded the most efficiently against “ the heroic practice,”—against the lethal confidence of their brethren. The world, however, is now beginning to awake ; and systems of medicine, which all, *virtually*, eschew drugs, are now everywhere established or establishing. Even a consultation of physicians, though here we might expect that the rashness and ignorance of individuals would be checked, has often proved signally, as it has been long proverbially, fatal.

The late Dr Gregory, the last of our Scottish learned physicians, who was long at the head of the Edinburgh School of Medicine, and long the most successful guardian of the lives of the illeces in this northern metropolis ;—Dr Gregory tells us, that after “ being admitted from his earliest youth behind the curtain, and let into the secret of the medical drama,” and “ after two-and-thirty of the best years of his life spent in learning, in teaching, and

complete.—However apparently opposed to that of his rival, the theory of Hoffmann was, equally with that of Stahl, established on the Aristotelic psychology; although less dependent in practice on any peculiar hypothesis of mind, and more influenced by the mathematical and chemical crotchets of the time, and the Cartesian and Leibnitian theories. The Peripatetic doctrine, as interpreted by Philoponus, Aquinas, Scotus, &c., of the substantial difference of the Vegetable, Sensitive, and Rational Souls, corresponds exactly to Hoffmann's Nature or Organic Body,—his Sentient Soul,—and his Rational Soul; agents, according to him, differing in essence as in operation. The merits of this great improver of medicine, whose works are now so culpably neglected, are canvassed by Dr Thomson with equal learning and discrimination. We can only afford to quote the following observations:—

In practising physic, he has found much to confirm, and nothing to shake that unfavourable opinion of his own profession, and of a vast majority of those who have taught and practised it." Dr Gregory, after farther stating, "that he did not know of any one disease, or of any one remedy that had not been the subject of obstinate controversy," thus sums up his confidence in the wisdom of medical practitioners, even met in medical conference:—"I am sure, that I would not trust one paw of my great Newfoundland dog to a consultation of thirty, or of three hundred of them." (Memorial, &c., p. 221, sq.)

Farther, we have seen that Hoffmann attributes the dangers of medical practice in a great measure to the illiterate rashness of the practitioner. And what says Dr Gregory? He says "that very many physicians, in this island, have had no advantages in point of learned and liberal education; and of course despise most heartily such education, and take care to express very freely their contempt of it. Still worse, they frequently take occasion to convince the world, by their writings, that they are profoundly ignorant of the first principles of science, and even of grammar. I think it more than possible, that in fifty or an hundred years, the business of Physician will not be regarded, even in England, as either a learned or a liberal profession." (Add. Mem. 1803, p. 245.)

We shall see hereafter, that the Medical Faculty of the University of Edinburgh have done all in their power to accelerate this result; for very soon after Gregory's death, and long before the earliest term which he had anticipated as the possible date of the final decadence of his profession, the Edinburgh Medical Faculty were allowed formally to eviscerate the Edinburgh Medical Degree of every requirement of liberal qualification. But if Pope Adrian VI. be right in his Malthusian vindication of the healing art, the Medical Faculty of the University of Edinburgh must be regarded as public benefactors: "Immo expedit medicos esse; ne tandem mundus ab incolis opprimeretur, qui, sine ope medica, in multitudinem nimiam exaugeantur."]

"The great and prominent merits of Hoffmann as a medical philosopher, undoubtedly consisted in his having perceived and pointed out more clearly than any of his predecessors, the extensive and powerful influence of the Nervous System, in modifying and regulating at least, if not in producing, all the phenomena of the organic as well as of the animal functions in the human economy, and more particularly in his application of this doctrine to the explanation of diseases. Galen had recorded many facts which had been observed before his time, by Erasistratus, Hierophilus, and others, relative to the nervous system, considered as the organ of sense and voluntary motion, and to these he had added several new observations and experiments of his own. But it was not till the publication of the elaborate works of Willis and Vicussens, that the structure, distribution, and functions of that system seem to have become the objects of very general attention among medical men. These authors pointed out many examples of sympathies existing between different parts of the human body through the medium of the nervous system, in the states both of health and disease; and Mayow, Baglivi, and Pacchioni, endeavoured to account for some of these sympathetic actions, by a contractile power which they erroneously supposed to be lodged in the fibres of the dura mater. It was reserved for Hoffmann, however, to take a comprehensive view of the nervous system, not only as the organ of sense and motion, but also as the common centre by which all the different parts of the animal economy are connected together, and through which they mutually influence each other. He was, accordingly, led to regard all those alterations in the structure and functions of this economy, which constitute the state of disease, as having their primary origin in affections of the nervous system, and as depending, therefore, upon a deranged state of the imperceptible and contractile motions in the solids, rather than upon changes induced in the chemical composition of the fluid parts of the body."—Pp. 195, 196.

Boerhaave's motto,—"Simplex Veri sigillum,"—stands in glaring contrast with his system. In practice he was a genuine follower of Hippocrates and nature; in theory at once Peripatetic, and Cartesian, and Leibnitian, Iatro-chemist and Mechanician, Humorist and Solidist, his system presents only a plausible conciliation of all conflicting hypotheses. The eclecticism of Boerhaave, destitute of real unity, had no principle of stability, and was especially defective in relation to the vital powers. It was accordingly soon essentially modified by his disciples, and an approximation quietly effected to the simpler but more comprehensive principles of Hoffmann. De Gorter, Winter, Kaau Boerhaave, and Gaubius, all co-operated to this result; but the pupil who hazarded the most important changes on the system of his master, and who, indeed, contributed perhaps more than any other individual to the improvement of medical science in general, was Haller. In the development of his great doctrine

of irritability, Haller is, indeed, not the pupil of Boerhaave, but a follower of Hoffmann and Glisson. Dr Thomson's history of this doctrine is one of the most valuable portions of his work; and his account of the celebrated controversy touching the principle of vital and involuntary motion between Whytt and Haller, will be found not more attractive to professional physicians, than to all who take any interest in the philosophy of animated nature.

Having thus indicated Cullen's point of departure, Dr Thomson now guides us along the steps of his advance. Under the heads of Physiology, Pathology, and Therapeutics, a detailed account is given of Cullen's system, in its common and in its peculiar doctrines. In this, the principal portion of the work, is exhibited, for the first time, (and chiefly from manuscript sources,) a comprehensive view of Cullen's services to medical science; much original information is supplied; new light is thrown upon points hitherto obscure; many prevalent misconceptions are rectified; and some unworthy, we are sorry to add, hitherto successful, plagiarisms are exposed. Cullen's reputation had suffered from misrepresentation, ignorance, and neglect; but never was the honour of an author more triumphantly vindicated by his biographer. We regret our inability to do any justice to this admirable survey; which is, indeed, not more valuable as an appreciation of Cullen's merits, than as a supplement to the history of modern medicine. An outline of its contents would be of little interest or value; and even an outline would exceed our limits. — — —

To the history of Cullen's doctrines in relation to those of previous theorists, Dr Thomson subjoins an account,—and the best we have ever seen,—of the contemporary progress of medicine in the schools of Montpellier and Paris. On this, however, we cannot touch. Our limits also preclude us from following him in his important discussion on medical education. We warmly recommend this part of the volume to those interested in the subject. A curious letter of Adam Smith (prior to the publication of his *Wealth of Nations*) on Universities and Degrees, will be admired for its ability by those who dissent from his well-known doctrine upon these points. We regret that we cannot make room for this very characteristic production, which is now for the first time given to the public. Its praise of the Scottish Universities, and its opinion as to Visitations, are particularly worthy of notice.

The results of the late Royal Commission of Visitation will by some, perhaps, be viewed as affording a good commentary on Dr Smith's text. "In the present state of the Scotch Universities, I do most sincerely look upon them as, in spite of all their faults, without exception the best seminaries of learning that are to be found anywhere in Europe." [Smith would not say this *now*; and he said it then, probably, in utter ignorance of the Dutch and German Universities.] "They are, perhaps, upon the whole, as unexceptionable as any public institutions of that kind, which all contain in their very nature the seeds and causes of negligence and corruption, have ever been, or are ever likely to be. That, however, they are still capable of amendment, and even of considerable amendment, I know very well; and a Visitation is, I believe, the only proper means of procuring them this amendment. But before any wise man would apply for the appointment of so arbitrary a tribunal, in order to improve what is already, upon the whole, *very well*, he ought certainly to know, with some degree of certainty, first, who are likely to be appointed visitors; and, secondly, what plan of reformation those visitors are likely to follow."—Besides the medical matters we have been able to notice, this volume contains various other topics of general interest. The letters alone which it supplies of distinguished individuals form an important addition to the literary history of Scotland during last century. David Hume, Adam Smith, Lord Kames, Duhamel, William Hunter, Black, Senae, Fothergill, are among Cullen's most frequent correspondents.

We look forward to the concluding volume with no little curiosity. It will trace of course the influence of Cullen's speculations on the subsequent progress of medicine, and, we hope, continue (what Dr Thomson has already proved himself so well qualified to execute) the history of this science to the present day.

EDUCATION.

I.—ON THE STUDY OF MATHEMATICS, AS AN EXERCISE OF MIND.*

(JANUARY, 1836.)

Thoughts on the Study of Mathematics as a part of a Liberal Education. By the Rev. WILLIAM WHEWELL, M.A., Fellow and Tutor of Trinity College. 8vo. Cambridge: 1835.

WE saw the announcement of this pamphlet with no ordinary interest,—from the subject,—from the place of publication,—and from the author.

The *subject* is one of great importance in the science of educa-

* [In French by M. Peisse; in Italian by S. Lo Gatto; in German, as a separate pamphlet, under the title,—“Ueber den Werth und Unwerth der Mathematik, als Mittel der hoehern geistigen Ansbildung, Cassel, 1836.” To this last there is an able preface; and the translator publishes the paper from “an intimate and resistless conviction that the plan of study in some of our new gymnasia comprehends too great a variety of objects, and, especially, lavishes too much time and application on mathematical instruction;—an instruction without interest to the majority of students, which, at the same time, pays no regard to the differences of natural disposition and future destination, overloads the memory, and compromises the development of the higher mental and moral capacities, while, more especially, it stunts the evolution of that free and independent activity of thought on which a utility for life and a susceptibility for its noblest avocations depend.”—M. Peisse has likewise, in his preface, convincingly maintained the same position. This was also eloquently supported, with reference to this article, by S. Vallauri before, among other auditors, his Majesty of Sardinia;—“*Thomae Vallaurii De vitii in puerili institutione vitandis oratio. Habita in Regio Taurinensi Athenaeo, III. nonas Novembres an. M.DCCC.LII.*”

This article was attacked in a pamphlet published by Professor Chevallier of Durham, in the course of the year when it was published; but his opposition being either mere assertion or mere mistake, I do not find it necessary

tion. Whether, and to what extent, the study of mathematics conduces to the development of the higher faculties, is a question which, though never adequately discussed, has been very confidently and very variously decided. The stream of opinions, and the general practice of the European schools and universities, allow to that study, at best, only a subordinate utility as a mean of *liberal* education—that is, an education in which the individual is cultivated, not as an instrument towards some ulterior end, but as an end unto himself alone; in other words, an education, in which his absolute perfection as a man, and not merely his relative dexterity as a professional man, is the scope immediately in view. But, at the same time, it cannot be denied, that signs of a revolutionary tendency in popular opinion, touching the objects and the end of education, are, in this nation at least, becoming daily more and more obtrusive; and as the extended study of mathematics is that mainly proposed, in lieu of the ancient branches of discipline which our innovators would retrench, a professed inquiry, like the present, into the influence of this study on the intellectual habits, comes invested, independently of its general importance, with a certain local and temporary interest.

But the *centre* from which it proceeds, enhances also the interest of the publication. In opposition to the general opinion of the learned world,—in opposition to the practice of all other universities, past or present,—in opposition even to its oaths and statutes, and to the intention of its founders and legislators, the University of Cambridge stands alone in *now* making mathematical science the principal object of the whole liberal education it affords; and mathematical skill the sole condition of the one tripos of its honours, and the necessary passport to the other:—thus restricting to the narrowest proficiency all places of distinction and emolument in university and college, to which such honours constitute a claim;—thus also leaving the immenso majority of its alumni without incitement, and the most arduous and important studies void of encouragement and reward. It is true,

to say anything in reply. In fact, his defence of “The Study of Mathematics as conducive to the development of the Intellectual Powers,” may suffice to show how little, even by an able advocate, can be alleged in vindication of their utility in this respect at all.

Certain statements in the criticism have also been controverted by Professor Boole in his very able “Mathematical Analysis of Logic,” in 1847. I shall consider these in a note. (P. 280.)

On Dr Whewell’s rejoinder, see the end of the article.]

indeed, that the effect of this contracted tendency of the *public university* is, in some degree, tempered by certain favourable accidents in the constitution of more than one of its *private colleges*; but with every allowance for petty and precarious counteraction, and latterly for some very inadequate legislation, the University of Cambridge, unless it can demonstrate that mathematical study is the *one best*, if not the one exclusive, mean of a general evolution of our faculties, must be held to have established and maintained a scheme of discipline, more partial and inadequate than any other which the history of education records. That no Cambridge mathematician has yet been found to essay this demonstration, so necessary for his university, so honourable to his science, has always appeared to us a virtual admission, that the thesis was incapable of defence. A treatise, therefore, apparently on the very point, and by a distinguished member of the university, could not fail of engaging our attention; and this, whether it proposed to defend the actual practice of the seminary, or to urge the expediency of a reform.

From the character of its *author*, the pamphlet before us likewise comes recommended by no mean claim to consideration. Mr Whewell has already, by his writings, approved to the world, not only his extensive acquirements in mathematical and physical science, but his talent as a vigorous and independent thinker. To a narrower circle, he is known as the principal public tutor of the principal college of his university; and in this relation, his zeal, and knowledge, and ability have concurred in raising him to an enviable eminence. Though more peculiarly distinguished by his publications in that department of science so exclusively patronised by the university, he has yet shown at once his intelligence and liberality, by amplifying the former circle of studies pursued in the college under his direction; and, in particular, we are informed, that he has exerted his influence in awakening a new spirit for the cultivation of mental philosophy; in which department he has already introduced, or is in the course of introducing, a series of more appropriate authors than those previously in use.

In these circumstances it was with more than usual expectation that we received Mr Whewell's pamphlet. Its perusal—must we say it?—has disappointed us. The confession is unavoidable. Even the respect which we entertain for the character and talents of the author, compels us to be plain rather than pleasant with his work. As a writer, Mr Whewell has long out-grown the need

of any critical dandling: the question he agitates is far too serious to tolerate the bandying of compliments; his authority, in opposition to our conviction, is too imposing to allow of quarter to his reasoning; whilst we are confident, that he is himself too sincere a champion of truth, to accept of any favour but what the interest of truth demands.

We say, that we are disappointed with the pamphlet, and this on sundry accounts. We are disappointed, certainly, that its author did not here advocate for the university the liberal views which he had already extended to his college. But taking it for a vindication of mathematical study, as the principal mean in the cultivation of the reasoning faculty,—supposing also that the reasoning faculty is that whose cultivation is chiefly to be encouraged in the liberal education of a university,—considering it, in a word, from its own point of view alone, we say that we are disappointed with it, as failing signally in the accomplishment of what it proposes. In fact, had our opinion not previously been decided on the question, the perusal of this argument in defence of mathematical study, as a useful gymnastic of the mind, would have only tended to persuade us, that in this relation, it was comparatively useless.

Before entering on details, it is proper here, once for all, to premise:—In the *first* place, that the question does not regard, the *value of mathematical science, considered in itself, or in its objective results*, but the *utility of mathematical study*, that is, in its *subjective effect, as an exercise of mind*; and in the *second*, that the expediency is not disputed, of leaving mathematics, as a co-ordinate, to find their level among the other branches of academical instruction. It is only contended, that they ought not to be made the *principal*, far less the *exclusive*, object of academical encouragement. We speak not now of *professional*, but of *liberal*, education; not of that, which considers the mind as an instrument for the improvement of science, but of this, which considers science as an instrument for the improvement of mind.

Of all our intellectual pursuits, the study of the mathematical sciences is the one, whose utility as an intellectual exercise, when carried beyond a moderate extent, has been most peremptorily denied by the greatest number of the most competent judges; and the arguments, on which this opinion is established, have hitherto been evaded rather than opposed. Some intelligent mathematicians, indeed, admit all that has been urged against

their science, as a principal discipline of the mind ; and only contend that it ought not to be extruded from all place in a scheme of liberal education. With these, therefore, we have no controversy. More strenuous advocates of this study, again, maintain, that mathematics are of primary importance as a *logical exercise* of reason ; but unable to controvert the evidence of its contracted and partial cultivation of the faculties, they endeavour to vindicate the study in general, by attributing its evil influence to some peculiar modification of the science ; and thus hope to avoid the loss of the whole, by the vicarious sacrifice of a part. But here unfortunately they are not at one. Some are willing to surrender the modern *analysis* as a gymnastic of the mind. They confess, that its very perfection as an instrument of discovery unfits it for an instrument of mental cultivation, its formulæ mechanically transporting the student with closed eyes to the conclusion ; whereas the ancient *geometrical* construction, they contend, leads him to the end, more circuitously, indeed, but by his own exertion, and with a clear consciousness of every step in the procedure. Others, on the contrary, disgusted with the tedious and complex operations of *geometry*, recommend the *algebraic* process as that most favourable to the powers of generalization and reasoning ; for, concentrating into the narrowest compass the greatest complement of meaning, it obviates, they maintain, all irrelevant distraction, and enables the intellect to operate for a longer continuance, more energetically, securely, and effectually.—The arguments in favour of the study, thus neutralize each other ; and the reasoning of those who deny it more than a subordinate and partial utility, stands not only uncontroverted, but untouched,—not only untouched, but admitted.

Mr Whewell belongs to the class of thorough-going advocates ; he would maintain the paramount importance of mathematical study in general ; but willingly allows the worst that has been urged against it to be true of certain opinions and practices, to which he is opposed. The obnoxious modifications are not, however, with him coincident either with the *geometric*, or with the *analytic*, method ; but though, we think, if fairly developed, his principles would tend to supersede the latter,—as he has applied them, they merely affect certain alleged abuses in both departments of the science.

We were disappointed in finding so little said on the general argument ; and the special reasoning we must be allowed to dis-

regard, as we cannot recognise a suspected substance to be wholesome food, merely because certain bits of it are admitted to be deadly poison.

But the general argument is not only brief but inconclusive. The usual generalities, the common vague assertions, we have, in praise of mathematics, and of the logical habits, which it is *assumed*, that they induce; but Mr Whewell controverts none of the grounds, he refers to none of the authorities, which go to prove that the tendency of a too exclusive study of these sciences is, absolutely, to disqualify the mind for observation and common reasoning. We cannot now criticise its details, though to some we shall allude in the sequel; but the very conception of the argument is vicious. Mr Whewell contrasts *Mathematics* and *Logic*, and endeavours to establish the high and general importance of the former, by showing their superiority to the latter as a school of *practical* reasoning. Now admitting, what we are far indeed from doing, that the merits of the two sciences are fully produced and fairly weighed against each other, still the comparison itself is invalid. Logic, by a famous distinction, is divided:—into Theoretical or General Logic (*χειρὶς πραγμάτων, docens*), in so far as it analyzes the mere laws of thought; and into Practical or Special Logic (*ἰσχύου, utens*), in so far as it applies these laws to a certain matter or class of objects. The former is *one*, and stands in the same common relation to all the sciences; the latter is *manifold*, and stands in proximate relation to this or that particular science, with which it is in fact identified. Now, as all matter is either *necessary* or *contingent* (a distinction which may be here roughly assumed to coincide with *mathematical* and *non-mathematical*), we have thus, besides one theoretical or general logic, also *two* practical or special logics in their highest universality and contrast.

THEORETICAL LOGIC.

1) PRACTICAL LOGIC,

As specially applied to *Necessary Matter* = *Mathematical reasoning*.

2) PRACTICAL LOGIC,

As specially applied to *Contingent Matter* = *Philosophy and General reasoning*.*

Now, the question which Mr Whewell proposes to handle, is—

* [The study of Language, if conducted upon rational principles, is one of the best exercises of an applied Logic. This study I cannot say that any of our universities encourage. To master, for example, the *Minerva* of Sanctius with its commentators is, I conceive, a far more profitable exercise of mind than to conquer the *Principia* of Newton.—But I anticipate.]

What is the best instrument for educating men to a full development of the reasoning faculty? and his answer to that question is—*Mathematics*. But the reasoning faculty of men, being in *all principally, in most altogether*, occupied upon contingent matter, comprising, what Mr Whewell himself calls,—“*the most important employments of the human mind* ;” he was bound articulately to prove, what certainly cannot be presumed, that Mathematics, (the Practical Logic of necessary matter,) cultivate the reasoning faculty for its employment on *contingent matter*, better than Philosophy, &c. —the Practical Logic itself of *contingent matter*. But this he does not even attempt. On the contrary, after misstating the custom of “our universities,” he actually *overlooks* the existence of the practical logic of contingent matter altogether ;—then, *assuming* mathematics, the logic of necessary matter, to be the *only practical* logic in existence, he lightly concedes to it the victory over *theoretical* logic, on the ground, that “*reasoning, a practical process, must be taught by practice better than by precept*.” The primary condition and the whole difficulty of the problem is thus eluded ; for it behoved him to have proved, not to have assumed, the paradox :—*That the study of necessary reasoning alone, is a better exercise of the habits of probable reasoning, than the practice of probable reasoning itself, and that, also, illustrated by the theory of the laws of thought and of reasoning in general*. We may at once admit, that theoretical logic realizes its full value only through its practical applications. But does it therefore follow,—either that a *useful practice is independent of theory*, or that we shall *come best trained to the hunting-field of probability, by assiduous locomotion on the railroad of calculus and demonstration* ? But of this hereafter.

Having laid it down by this very easy process, that “*Mathematics are a means of forming logical habits better than Logic itself*,” Mr Whewell broaches the important question :—

“How far the study thus recommended is justly chargeable with *evil consequences* ? . . . Does it necessarily make men too little sensible to other than mathematical reasonings ? Does it teach them to require a kind of fundamental principles and a mode of deduction which are not in reality attainable in questions of morals or politics, or even of natural philosophy ? If it does this, it may well unfit men for the most important employments of the human mind, &c. . . . But is this, in fact, usually the case ? And if it happen sometimes, and sometimes only, under what circumstances does it occur ? This latter question has, I think, important practical bearings, and I shall try to give some answer to it.

“I would reply, then, that [1st.] if mathematics be taught in such a man-

ner, that its foundations appear to be laid in arbitrary definitions without any corresponding act of the mind;—or [2°.] if its first principles be represented as borrowed from experience, in such a manner that the whole science is empirical only;—or [3°.] if it be held forth as the highest perfection of the science to reduce our knowledge to extremely general propositions and processes, in which all particular cases are included:—so studied, it may, I conceive, unfit the mind for dealing with other kinds of truth.”—P. 8.

The development and illustration of these *three* propositions occupy the remainder of the pamphlet.

Now, it will be observed that Mr Whewell does not here or elsewhere, *attempt any vindication* of mathematics from those charges to which it is thus acknowledged to be obnoxious; for it is no defence of the *study in general*, against which alone these accusations have from *all ages* been advanced, to admit, nay to exaggerate, the evil tendency of certain *petty recent* opinions, wholly un contemplated by the accusers.

The principal value of Mr Whewell's pamphlet lies in the special illustrations of the *first* and *third* heads. There the mathematician is within his sphere. On these we should not have been indisposed to offer some remarks; but the technical nature of the subject could not interest the general reader; and in the words of Rabbinic apophthegm,—“*Dies brevis, et opus multum, et paterfamilias urget.*”

The *second* head, in which Mr Whewell trenches on philosophy, we cannot altogether overlook. He says:—

“I will not suppose that any person who has paid any attention to mathematics does not see clearly the difference between *necessary* truths and empirical facts; between the evidence of the properties of a triangle, and that of the general laws of the structure of plants. The peculiar character of mathematical truth is, that it is necessarily and inevitably true; and one of the most important lessons which we learn from our mathematical studies is a knowledge that there are such truths, and a familiarity with their form and character.

“This lesson is not only lost, but read backwards, if the student is taught that there is no such difference, and that mathematical truths themselves are learnt by experience. I can hardly suppose that any mathematician would hold such an opinion with regard to geometrical truths, although it has been entertained by metaphysicians of no inconsiderable acuteness, as Hume. We might ask such persons how Experience can show, not only that a thing *is*, but that it *must be*; by what authority she, the mere recorder of the actual occurrences of the past, pronounces upon all possible cases, though as yet to be tried hereafter only, or probably never. Or, descending to particulars; when it is maintained that it is from experience alone that we know that two straight lines cannot enclose space, we ask, who ever made the trial, and how? and we request to be informed in what way he ascertained that the lines with which he made his experiment were accurately straight. The

fallacy is in this case, I conceive, too palpable to require to be dwelt upon."
—P. 32.

Now, in the *first* place, it is wholly beyond the domain of mathematics to inquire into the origin and nature of their principles. Mathematics, as *Plato*,* *Aristotle*,† and *Proclus*,‡ observe, are founded on *hypotheses*, of which they can render no account; and for this reason, *Plato*, and many subsequent philosophers, even deny to them the denomination of *Science*. "The geometer, *qua* geometer," says *Aristotle*, "can attempt no discussion of his principles."§ As observed by *Seneca*:—"The Mathematical is, so to speak, a superficial science; it builds on a borrowed site, and the principles, by aid of which it proceeds, are not its own: Philosophy, on the contrary, begs nothing from another; it rears its own edifice from its own soil."¶ These authorities represent the harmonious opinion of philosophers and mathematicians, in ancient and in modern times.

But, in the *second* place, if a mathematician know so little of his province, as to make such an inroad into that of the philosopher, we cannot for our life imagine, how a metaphysical flourish at the head of a mathematical system can affect the treatment of the science, and through that affect the mind of the student. We doubt, indeed, whether one mathematician in a hundred has ever possessed an opinion, far less the right to an opinion, on the matter.

In the *third* place, what are we to think of the assumption, that the study of mathematics is requisite to make us aware of the existence of Necessary Cognitions—Necessary Truths? That certain *notions*, that certain *judgments*, there are, which we are compelled to recognise as necessary, is a *fact* that was never unknown to, was never denied by, any rational being. Whether these necessary notions and judgments are *truths*, has been indeed doubted by certain philosophers; but of this doubt mathematics can afford us no solution,—no proper materials for a solution. The very propositions on which these sciences build their whole edifice of demonstration, are as well known by the tyro when he opens his *Euclid*, as by the veteran *Euler* or *Laplace*; nay, they

* De Repub. Ll. vi. vii.

† Metaph. L. iv. (iii.) c. 2, text 7.

‡ In Euclid. L. i. p. 22.

§ Post. Analyt. L. i. c. 12, § 3. Compare Phys. L. i. c. 2, text 8.—Metaph. L. xi. (xlii.) cc. 3, 4.—Ibid, L. iv. (iii.) c. 3, text 7.

¶ Epist. lxxxviii.

are possessed, even in prior property, by the philosopher, to whom, indeed, the mathematician must look for their vindication and establishment.

But, in the *fourth* place, if Mr Whewell "can hardly suppose that any mathematician would hold the opinion that mathematical truths are learned from experience," we cannot understand why he takes the trouble of writing this treatise against such an opinion, as actually held, and held by a whole "school of mathematics?" Perhaps, he means by "any mathematician,"—any mathematician worthy of the name. But then if this "school of mathematics" be so contemptible, why write, and that so seriously, against them? This, we may observe, is not the only contradiction in the pamphlet we have been wholly unable to reconcile.

But, in the *fifth* place, the contrast of the mathematician and metaphysician is itself an error.—In regard to the *exculpation of the mathematicians*, we need look no farther than to the late Sir John Leslie for its disproof. "Geometry" (says that original thinker, and he surely was a mathematician,) "is thus founded likewise on observation; but of a kind so familiar and obvious, that the primary notions which it furnishes might seem intuitive."*—As to the *inculcation of the metaphysicians*,—why was Locke not mentioned in place of Hume? If Hume did advance such a doctrine, he only sceptically took up what Locke dogmatically laid down. But Locke himself received this opinion from a mathematician; for this part of his philosophy he borrows from Gassendi: and, what is curious, he here deserts the schoolman from whom he may appear to have adopted, as the basis of his philosophy, the twofold origin of knowledge,—*Sense and Reflection*; for the unacknowledged master maintains on this, as on many other questions, opinions far more profound than those of his disciple.—But in regard to *Hume*, Mr Whewell is wholly wrong. So far is this philosopher from holding "that geometrical truths are learnt by experience," that, while rating mathematical science, as a study, at a very low account, he was all too acute to countenance so crude an opinion in regard to its foundation; and, in fact, is celebrated for maintaining one precisely the reverse. On this point Hume was neither sensualist nor sceptic, but

* Rudiments of Plane Geometry, p. 18; and more fully in Elements of Geometry and Geometrical Analysis, p. 453.

deserted Ænesidemus and Locke to encamp with Descartes and Leibnitz.

In the *sixth* place, the quality of *necessity* is correctly stated by Mr Wbewell as the criterion of a pure or *a priori* knowledge. So far, however, from this being a truism always familiar to mathematicians, it only shows that Mr Wbewell has himself been recently dipping into the Kantian philosophy; of which he here adduces a famous principle and one of the most ordinary illustrations. The principle was indeed enounced by Leibnitz, in whom mathematics may assert a share; but that philosopher failed to carry it out to its most important applications. In his philosophy, our conceptions of *Space* and *Time* are derived from experience. We can trace it also obscurely in Descartes, and in several of the older metaphysicians; but assuredly it was *nothing "palpable," nothing to which the mathematicians can lay claim.* On this principle, as first evolved,—at least, first signalised by Kant, *Space* and *Time* are merely modifications of mind, and mathematics thus only conversant about necessary thoughts,—thoughts which can even make no pretension to truth and objective reality. Are the foundations of the science thus better laid?—But to more important matters.

It is an ancient and universal observation, that different studies cultivate the mind to a different development; and as the end of a liberal education is the *general and harmonious evolution of its faculties and capacities in their relative subordination*, the folly has accordingly been long and generally denounced, which would attempt to accomplish this result, by the partial application of certain partial studies. And not only has the effect of a one-sided discipline been remarked upon the mind in general, in the disproportioned development of one power at the expense of others; it has been equally observed in the exclusive cultivation of the same power to some special energy, or in relation to some particular class of objects. Of this no one had a clearer perception than *Aristotle*; and no one has better illustrated the evil effects of such a cultivation of the mind, on all and each of its faculties. He says:—

"The capacity of receiving knowledge is modified by the habits of the recipient mind. For, as we have been habituated to learn, do we deem that every thing ought to be taught; and the same object presented in an unfamiliar manner, strikes us, not only as unlike itself, but, from want of custom, as comparatively strange and unknown. For the accustomed is the better known. How great, indeed, is the influence of custom, is manifested in the laws; for here the fabulous and puerile exert a stronger influence, through

habit, than, through knowledge, do the true and the expedient. Some, therefore (who have been overmuch accustomed to mathematical studies), will only listen to one who demonstrates like a mathematician; others (who have exclusively cultivated analogical reasoning), require the employment of examples; while others, again, (whose imagination has been exercised at the expense of judgment), deem it sufficient to adduce the testimony of a poet. Some are satisfied only with an exact treatment of every subject; to others, again, from a trifling disposition, or an impotence of continued thought, the exact treatment of any becomes irksome. We ought, therefore, to be educated to the different modes and amount of evidence, which the different objects of our knowledge admit." *

And again :—

"It is the part of a well-educated man to require that measure of accuracy in every discussion, which the nature of its object-matter allows; for it would not be more absurd to tolerate a persuasive mathematician, than to ascribe an orator to demonstration. But every one judges competently in the matters with which he is conversant. Of these, therefore, he is a good judge;—of each, he who has been disciplined in each, absolutely, he who has been disciplined in all." †

But the difference between different studies, in their contracting influence, is great. Some exercise, and consequently develope, perhaps, one faculty on a single phasis, or to a low degree; whilst others, from the variety of objects and of relations which they present, calling into strong and unexclusive activity the whole circle of the higher powers, may almost pretend to accomplish alone the work of catholic education.

If we consult reason, experience, and the common testimony of ancient and modern times, none of our intellectual studies tend to cultivate *a smaller number of the faculties, in a more partial or feeble manner, than mathematics*. This is acknowledged by every writer on education of the least pretension to judgment and experience; nor is it denied, even by those who are the most decidedly opposed to their total banishment from the sphere of a liberal instruction. *Germany* is the country which has far distanced every other in the theory and practice of education; and the three following testimonies may represent the actual state of opinion in

* *Metaph.* l. ii. ("Ἀλλὰ τὸ ἑλκυστὸν" c. 3, text. 14.

† *Eth. Nicom.* l. i. c. 3. The text universally received ("Ἐκαστος δὲ κρίνει καλῶς ἃ γινώσκει καὶ τούτων ἰστὶν ἀγαθὸς κριτὴς καθ' ἑκάστον ἄρα ὁ πεπαιδευμένος ἀπλῶς δὲ ὁ περὶ πάντων πεπαιδευμένος"), is at once defective and tautological. The cause of the corruption is manifest; the emendation simple and, we think, certain. "Ἐκαστος δὲ κρίνει καλῶς ἃ γινώσκει, τούτων ἄρ' ἰστὶν ἀγαθὸς κριτὴς καθ' ἑκάστον, ὁ καθ' ἑκάστον πεπαιδευμένος, ἀπλῶς δὲ, ὁ περὶ πάντων πεπαιδευμένος.

the three kingdoms of the Germanic union which stand the highest in point of intelligence—Prussia, Bavaria, and Wirtemberg.

The first authority, is that of *Bernhardi*, one of the most intelligent and experienced authorities on education to be found in Prussia:—

"It is asked—*Do Mathematics awaken the judgment, the reasoning faculty, and the understanding in general to an all-sided activity?* We are compelled to answer,—*No.* For they do this only in relation to a knowledge of *quantity*, neglecting altogether that of *quality*.—Further, *is this mathematical evidence, is this coincidence of theory and practice, actually found to hold in the other branches of our knowledge?* The slightest survey of the sciences proves the *very reverse*; and teaches us that mathematics tend necessarily to induce that numb rigidity into our intellectual life, which, pressing obstinately straight onwards to the end in view, takes no heed or account of the means by which, in different subjects, it must be differently attained."*

The second authority we quote, is that of the distinguished philosopher who has long so beneficially presided over the Royal Institute of Studies in Munich,—*Von Weiller*:—

"*Mathematics and Grammar* differ essentially from each other, in respect to their efficiency, as general means of intellectual cultivation.† The former have to do only with the intuitions of *space and time*, and are, therefore, even in their foundation, *limited to a special department of our being*; whereas the latter, occupied with the *primary notions of our intellectual life in general*, is co-extensive with its universal empire. On this account, the grammatical exercise of mind must, if beneficially applied, precede the mathematical. And thus are we to explain why the efficiency of the latter does not stretch so widely over our intellectual territory; why it never develops the mind on so many sides; and why, also, it never penetrates so profoundly. By mathematics, the powers of thought are less stirred up in their inner essence, than drilled to outward order and severity; and, consequently, manifest their education more by a certain formal precision, than through their fertility and depth. This truth is even signally confirmed by the *experience* of our own institution. The best of our former *Real scholars*, when brought into collation with the *Latin scholars*, could, in general, hardly compete with the most middling of these,—not merely in matters of language, but in every thing which demanded a more developed faculty of thought."‡

* *Ansichten, &c., i. e. Thoughts on the Organization of Learned Schools*, by A. F. Bernhardi, Doctor of Philosophy, Director and Professor of the Frederician Gymnasium, in Berlin, and Member of the Consistorial Council, 1818.

† On this see also, what we shall not quote, *Morgensterni Orat. De Literis Humanioribus*, p. 11.

‡ From a Dissertation accompanying the Annual Report of the Royal Institute of Studies, in Munich, for the year 1822, by its Director, Cajetan von

The third witness whom we call, is one, be it remarked, with a stronger bias to *realism*, in the higher instruction, than is of late, after the experience of the past, easily to be found in Germany. Professor Klumpp observes :—

“ We shall first of all admit, that *mathematics* only cultivate the mind on a *single phasis*. Their object is merely *form* and *quantity*. They thus remain, as it were, only on the surface of things, without reaching their essential qualities, or their internal and far more important relations,—to the feelings, namely, and the will,—and consequently *without determining the higher faculties to activity*. So likewise, on the other hand, the *memory* and *imagination* remain in a *great measure unemployed*; so that, strictly speaking, the *understanding* alone remains to them, and even this is cultivated and pointed *only in one special direction*. To a many-sided culture,—to an all-sided harmonious excitation and development of the many various powers, they can make no pretension. This, too, is strongly confirmed by *experience*, inasmuch as many mere mathematicians, however learned and estimable they may be, are still notorious for a certain one-sidedness of mind, and for a want of practical tact. If, therefore, mathematical instruction is to operate beneficially as a mean of mental cultivation, the chasms which it leaves must be filled up by *other objects of study*, and that harmonious evolution of the faculties procured, which our learned schools are bound to propose as their necessary end.”*

To the same general fact, we shall add the testimony of one of the shrewdest of human observers, we mean *Goethe*, who in a letter to *Zelter* thus speaks :—

“ This also shows me more and more distinctly, what I have long in secret been aware of, that the cultivation afforded by the *Mathematics* is, in

Weller, Privy Counsellor, Perpetual Secretary of the Royal Academy of Sciences, &c. This testimony is worthy of attention, not merely on account of the high talent, knowledge, and experience of the witness, but because it hints at the result of a disastrous experiment made by authority of Government throughout the schools of an extensive kingdom;—an experiment of which certain empirics would recommend a repetition amongst ourselves. But the experiment, which in schools organized and controlled like those of Bavaria, could be at once arrested when its evil tendency was sufficiently apparent, would, in schools circumstanced like ours, end only, either in their ruin, or in their conversion from inadequate instruments of a higher cultivation to effective engines of a disguised barbarism. We may endeavour, ere long, to prevent the experience of other nations from being altogether unprofitable to ourselves.

“ *Felix quem faciunt aliena pericula cautum.*”

* Die Gelehrten Schulen, &c., i. e. Learned Schools, according to the principles of a genuine humanism, and the demands of the age. By F. W. Klumpp, Professor in the Royal Gymnasium of Stuttgart.—1829, vol. ii. p. 41. An interesting account of the seminary established on Klumpp's principles, by the King of Wirtemberg, at his pleasure palace of Stetten, in 1831, is to be found in the *Conversations Lexicon fuer neuesten Zeit*. i. p. 727.

the highest degree, *one-sided, and contracted*. Nay, *Voltaire* does not hesitate somewhere to affirm, 'j'ai toujours remarqué que la géométrie *laisse l'esprit ou elle le trouve*.' *Franklin*, also, has clearly and explicitly enounced his particular aversion for mathematicians; as he found them, in the intercourse of society, insupportable from their *trifling and captious spirit*." *

Frederick the Great,† in his correspondence with *Voltaire*, says:

"As for Mathematics, I confess to you, that I fear them; they *tend too much to parch the intellect*."

Even *D'Alembert*, the mathematician, and professed encomiast of the mathematics, cannot deny the charge that they freeze and parch the mind: but he endeavours to evade it.

"We shall content ourselves with the remark, that if mathematics (as is asserted with sufficient reason) *only make straight the minds which are without a bias*, so they *only dry up and chill the minds already prepared for this operation by nature*." ‡

Yet what a confession! The Cambridge catholicon is thus a dose which never bestows health, but tends always to evolve the seeds of disease.

Nay, *Descartes*, the greatest mathematician of his age, and, in spite of his mathematics, also its greatest philosopher, was convinced from his own consciousness, that these sciences, however valuable as an instrument of external science, are absolutely pernicious as a mean of internal culture. *Baillet*, his biographer, frequently commemorates this; and first under the year 1623, the 28th of the philosopher, he records of *Descartes*, that:—

"It was now a long time, since he had been convinced of the *small utility* of the *Mathematics*, especially when studied on their own account, and not applied to other things. There was nothing, in truth, which appeared to him *more futile* than to occupy ourselves with simple numbers and imaginary figures, as if it were proper to confine ourselves to these *trifles* (*bagatelles*) without carrying our view beyond. There even seemed to him in this something *worse than useless*. His maxim was, that *such application insensibly disaccustomed us to the use of our reason*, and made us run the danger of losing the path which it traces." (*Cartesii Regulæ ad Directionem Iugenii*, Reg. iv. MSS.)—[The words themselves of *Descartes* deserve quotation:—*"Revera nihil inanius est, quam circa nudos numeros figurasque imaginarias ita versari, ut velle videamur in talem nugarum cogitione conquiescere, atque superficialis istis demonstrationibus, quæ casu sæpius quam arte inveniuntur, et magis ad oculos et imaginationem pertinent, quam ad intel-*

* Briefwechsel zwischen Goethe und Zelter, 1833, i. p. 430.

† Correspondence, Jan. 1738.

‡ *Mélanges*, t. iv. p. 184, ed. 1763. [Compare also *Esprit de l'Encycl. II. p. 349.*]

lectum, sic incubare, ut quodammodo *ipsa ratione uti desuescamus*; simulque nihil intricatius, quam tali probandi modo, novas difficultates confusis numeris involutas, expedire. Quum vero postea cogitarem, unde ergo fieret, ut primi olim Philosophiæ inventores, neminem Matheseos imperitum ad studium sapientiæ vellent admittere, [a fable, the oldest recorders of which flourished above eight centuries subsequent to Plato,*] tanquam hæc disciplina omnium facillima et maxime necessaria videretur, ad ingenia capessendis aliis majoribus scientiis erudienda et præparanda; plane suspicatus sum, *quandam eos Mathesim agnovisse, valde diversam a vulgari nostrae ætatis.*"—Baillet goes on:—"In a letter to Merseane, written in 1630, M. Descartes recalled to him that *he had renounced the study of mathematics for many years; and that he was anxious not to lose any more of his time in the barren operations of geometry and arithmetic, studies which never lead to any thing important.*"—Finally, speaking of the general character of the philosopher, Baillet adds:—"In regard to the rest of mathematics," (he had just spoken of astronomy, which Descartes thought, "*though he dreamt in it himself, only a loss of time,*")—"in regard to the rest of mathematics, those who know the rank which he held above all mathematicians, ancient and modern, will agree that he was the man in the world best qualified to judge them. We have observed that, after having studied these sciences to the bottom, *he had renounced them as of no use for the conduct of life, and solace of mankind.*"†

We shall refer to Descartes again.

How opposite are the habitudes of mind which the study of the Mathematical and the study of the Philosophical sciences‡ require

* [Fuelleborn, I may observe, questioned the antiquity of this story. He thinks that Bessarion, in the fifteenth century, was its author. It is found, however, recorded by various of the lower Greeks previous to him; but the oldest testimonies whom I have noticed are Ammonius Hermiæ (or Philoponns?) and David the Armenian. Ammouius and David flourished towards the conclusion of the fifth century; they were both scholars of Proclus. Are there any earlier authorities?]

† La Vie de Descartes, P. i. pp. 111, 112, 225. P. ii. p. 481.—[The *Regulæ* of Descartes, extracted also in the Port Royal Logic, were published, in full, at Amsterdam, in 1701. They are found in the third volume of Garnier's edition of the "*Œuvres Philosophiques de Descartes*," (that is, his works to the exclusion of the *Mathematical* and *Physical* writings); and were translated into French by M. Cousin, in his edition of the whole works of the Philosopher.]

‡ [Reminded by the preceding note,—it may be proper here to remark upon the vague universality which is given to the terms *philosophy* and *philosophical* in common English; an indefinitude limited specially to this country. Mathematics and Physics *may* here be called philosophical sciences; whereas, on the Continent, they are excluded from philosophy, philosophical being there applied emphatically to those sciences which are immediately or mediately *mental*. Hegel, in one of his works, mentions that in looking over what in England are published under the title of "*Philosophical Transac-*

and cultivate, has attracted the attention of observers from the most ancient times. The principle of this contrast lies in their different *objects*, in their different *ends*, and in the different *modes of considering their objects*;—differences in the sciences themselves, which calling forth, in their cultivators, different faculties, or the same faculty in different ways and degrees, determine developments of thought so dissimilar, that in the same individual a capacity for the one class of sciences has, not without reason, been considered as detracting from his qualification for the other.

As to their *objects*.—In the *first* place :—The Mathematical sciences are limited to the *relations of quantity* alone, or, to speak more correctly, to the *one* relation of quantities—*equality* and *inequality* ; the Philosophical sciences, on the contrary, are astricted to none of the categories, are coextensive with existence and its modes, and circumscribed only by the capacity of the human intellect itself.—In the *second* place :—Mathematics take no account of things, but are conversant solely about certain *images* ; and their whole science is contained in the separation, conjunction, and comparison of these. Philosophy, on the other hand, is mainly occupied with *realities* ; it is the science of a real existence, not more of an imagined existence.

As to their *ends*, and their *procedure to these ends*.—Truth or knowledge is, indeed, the scope of both ; but the kind of knowledge proposed by the one is very different from that proposed by the other.—In Mathematics, the whole principles are *given* ; in Philosophy, the greater number are to be *sought out* and established.—In Mathematics, the given principles are *both material and formal*, that is, they afford at once the conditions of the construction of the science, and of our knowledge of that construction (*principia essendi et cognoscendi*). In Philosophy, the given principles are *only formal*—only the logical conditions of the abstract possibility of knowledge.—In Mathematics, the whole science is virtually contained in its *data* ; it is only the evolution of a potential knowledge into an actual, and its procedure is thus merely *explicative*. In Philosophy, the science is *not* contained in *data* ;

tions," he had been unable to find any philosophy at all. This abusive employment of the words is favoured, I believe, principally at Cambridge ; for if Mathematics and Physics are not philosophical, then that university must confess that it now encourages no philosophy whatever. The history of this insular peculiarity might easily be traced.]

its principles are merely the rules for our conduct in the quest, in the proof, in the arrangement of knowledge: it is a transition from absolute ignorance to science, and its procedure is therefore *ampliative*.—In Mathematics we always *depart from the definition*; in Philosophy, *with the definition we usually end*.—Mathematics know nothing of causes; the research of causes is Philosophy; the former display only the *that* (*τὸ ὅτι*); the latter mainly investigates the *why* (*τὸ διότι*).^{*}—The truth of Mathematics is the *harmony of thought and thought*; the truth of Philosophy is the *harmony of thought and existence*.—Hence the absurdity of all applications of the mathematical method to philosophy.

It is, however, proximately in the different *modes of considering their objects* that Mathematics and Philosophy so differently cultivate the mind.

In the *first* place:—Without entering on the metaphysical nature of Space and Time, as the basis of concrete and discrete quantities, of geometry and arithmetic, it is sufficient to say that Space and Time, as the necessary conditions of thought, are, severally, to us absolutely one; and each of their modifications, though apprehended as singular in the act of consciousness, is, at the same time, recognised as virtually, and in effect, universal.

* [By *cause*, &c., with modern philosophers, I mean *efficient cause*; and should have stated this articulately, had the possibility of ambiguity ever been suggested. When I therefore said that Philosophy and Mathematics are distinguished, in that the former is, and the latter is not, a research of causes, I, of course, meant *and mean efficient causes*. A very acute philosophical mathematician, Professor Boole, in his "Mathematical Analysis of Logic," (pp. 11, sq., 81, sq.) makes me in this contradict Aristotle; and he is literally correct in his quotation from the Posterior Analytics, where Aristotle does declare, that the geometer investigates the *διότι*. Mr Boole has not, however, recollected, that Aristotle had *four* causes; and, as Mathematics are confessedly occupied with the *formal*, the philosopher, not only in the place adduced, but in sundry others, therefore states, that the mathematician is conversant about the *why*. But even Aristotle was fully aware, that the term *cause* or *principle* properly and emphatically pertains only to the *efficient*; and accordingly in his Endemian Ethics, (ii. 6.) he states this, adding, as an example, that "*what in mathematics are called principles, are so styled, not in propriety, but only by analogy or resemblance*." He indeed expressly denies to them the *efficient*, &c. (Metaph. iii. 2. alibi.)

Mr Boole, likewise, has not observed, that it is not *Abstract, Pure or Theoretical Logic* which I oppose to Mathematics, but that I oppose to each other *two Concrete, Applied or Practical Logics*; to wit, that of *necessary matter*—mathematics, and that of *contingent matter*—philosophy and common reasoning. See p. 264.]

Mathematical science, therefore, whose notions (as number, figure, motion) are exclusively modifications of these fundamental forms, separately or in combination, does not establish their universality on any *a posteriori* process of abstraction and generalization; but at once *contemplates the general in the individual*. The universal notions of philosophy, on the contrary, are, with a few great exceptions, generalizations from experience; and as the universal constitutes the rule under which the philosopher *thinks* the individual, philosophy consequently, the reverse of mathematics, *views the individual in the general*.

In the *second* place:—In Mathematics, quantity, when not divorced from form, is itself really presented to the intellect in a lucid image of phantasy, or in a sensible diagram; and the quantities which cannot thus be distinctly construed to imagination and sense, are, as only syntheses of unity, repetitions of identity, adequately, though conventionally, denoted in the vicarious combination of a few simple symbols. Thus both in geometry, by an ostensive construction, and in arithmetic and algebra, by a symbolical, the intellect is relieved of all effort in the support and presentation of its objects; and is therefore left to operate upon these in all the ease and security with which it considers the concrete realities of nature. Philosophy, on the contrary, is principally occupied with those general notions which are *thought* by the intellect but are not to be *pictured* in the imagination; and yet, though thus destitute of the light and definitude of mathematical representations, philosophy is allowed no adequate language of its own; and the common language, in its vagueness and insufficiency, does not afford to its unimaginable abstractions that guarantee and support, which, though less wanted, is fully obtained by its rival science, in the absolute equivalance of mathematical thought and mathematical expression.

In the *third* place:—Mathematics, departing from certain original hypotheses, and these hypotheses exclusively determining every movement of their procedure, and the images or the vicarious symbols about which they are conversant being clear and simple, the deductions of these sciences are *apodictic* or demonstrative; that is, the possibility of the contrary is, at every step, seen to be excluded in the very comprehension of the terms. On the other hand, in Philosophy (with the exception of the Theory of Logic), and in our reasonings in general, such demonstrative certainty is rarely to be attained; *probable* certainty, that is,

where we are never conscious of the impossibility of the contrary, is all that can be compassed; and this also, not being internally evolved from any fundamental *data*, must be sought for, collected, and applied from without.

[In the *fourth* place, (as observed by Aristotle and Kant,) of all our rational or *à priori* sciences, Mathematics alone admit of being at once learnt. As to Philosophy, a system without preparatory exercise is incommunicable; we can only learn to observe, to think, to reason—in a word, to *philosophize*. Thus Mathematics, but not Philosophy, can be taught to boys; and to be a Mathematician is no pledge that a man is not an imbecile or a barbarian.]

From this general contrast it will easily be seen, how an excessive study of the mathematical sciences not only does not prepare, but absolutely *incapacitates the mind*, for those intellectual energies which philosophy and life require. We are thus disqualified for *observation, either internal or external*,—for *abstraction and generalization*,—and for *common reasoning*; nay disposed to the alternative of blind *credulity* or of irrational *scepticism*.

That mathematics, in which the objects are purely ideal, in which the principles are given, in which, from these principles, the whole science is independently developed, and in which development the student is, as Aristotle expresses it, not an *actor*, but a mere *spectator*;—that mathematics can possibly in their study educate to any active exercise of the powers of *observation*, either as reflected upon ourselves, or as directed on the affairs of life and the phenomena of nature, will not, we presume, be maintained. But of this again.

That they do not cultivate the power of *generalization* is equally apparent. The ostensive figures of Geometry are no abstractions, —but concrete forms of imagination or sense; and the highest praise, accorded by the most philosophical mathematicians, to the symbolical notation of arithmetic and algebra, is, that it has relieved the mind of all intellectual effort, by substituting a sign for a notion, and a mechanical for a mental process. In mathematics, genus and species are hardly known.

Geometry, indeed, has been justly considered as cultivating rather the lowest degree of the *imagination** than any higher power of the understanding.—“*The Geometer*” (says *Philoponus*

* In this country, the term *Imagination* has latterly been used in a more contracted signification, as expressive of what has been called the creative

or rather *Ammonius*) "*considers the divisible forms in the imagination; for he uses his imagination as his board.*" *—"Those rejoice" (says *Albertus Magnus*), "*in the mathematical sciences whose organ of imagination for receiving figures is temperately dry and warm.*" †—"Among philosophers," (says *Fracastorius*, the mathematician, tho philosopher, the poet,) "some delight to investigate the *causes and substances* of things, and these are the Philosophers, properly so called. Others again, inquiring into the relations of certain accidents, are chiefly occupied about these, such as *numbers and figures*, and, in general, *quantities*. These latter are principally potent in the faculty of *imagination*, and in that part of the brain which lies towards its centre; this, therefore, they have hot, and capacious, and excellently conservative. Hence, they imagine well how things stand in their wholes and in relation to each other. But we have said, that every one finds pleasure in those functions which he is capable of performing well. *Wherefore these principally delight in that knowledge which is situate in the imagination, and they are denominated Mathematicians.*" ‡ Though no believers in Gall, there can, however, we think, be no doubt, that in the same individual there are very different degrees of imagination for different objects; and of these one of the most remarkable is, the peculiar capacity possessed by certain persons of presenting and retaining quantities and numbers,—the condition of a mathematical genius.—"*The study of mathematics*" (says *Descartes*, and he frequently repeats the observation,) "*principally exercises the imagination in the consideration of figures and motions.*" § Nay, on this very ground, he explains the incapacity of mathematicians for philosophy. "That part of the mind," says he, in a letter to Father Mersenne, "to wit, the *imagination, which is principally conducive to a skill in mathema-*

or productive imagination alone. Mr Stewart has even bestowed on the reproductive imagination the term *Conception*;—happily, we do not think; as both in grammatical propriety, and by the older and correcter usage of philosophers, this term (or rather the product of this operation—*Concept*) is convertible with *general notion*, or more correctly *notion*, simply, and in this sense is admirably rendered by the *Begriff* (what is grasped up) of the Germans.

* In *Aristot. de Anima*, Sign. B. iv. ed. Trincavelli, 1535.—(*Aristot. I. i. text. 16.*) So *Themistius*, frequently.

† In *Metaph. Aristot. L. 1. tract. i. c. 5.* So *Averroes*, frequently.

‡ De *Intellectione*, L. ii. Opera, f. 148, ed. 3. Venet. 1584.

§ *Lettres*, p. i. let. xxx.

tics, is of greater detriment than service for metaphysical speculations." *—In this connection of mathematics with imagination, Descartes, as we shall see, is confirmed by Pascal.—Sir Kenelm Digby also acutely says:—"I may observe, as our countryman Roger Bacon did long ago, that those students, who busy themselves much with such notions as reside wholly in the *Fantasie*, do hardly ever become idoneous for abstracted metaphysical speculations; the one having bulkie foundation of matter, or of the accidents of it, to settle upon (at least with one foot); the other flying continually, even to a lessening pitch, in the subtile air. And, accordingly, it hath been generally noted, that the exactest mathematicians, who converse altogether with lines, figures, and other differences of quantity, have seldom proved eminent in metaphysics or speculative divinity; nor again, the professors of these sciences, in the other arts. Much less can it be expected that an excellent physician, whose fancy is always fraught with the material drugs, that he prescribeth his apothecary to compound his medicines of, and whose hands are inured to the cutting up, and eyes to the inspection, of anatomised bodies, should easily and with success, flie his thoughts at so towering a game, as a pure intellect, a separated and unbodied soul." †—The dependence of mathematics on the lower imagination is recognised, in like manner, in the Kantian philosophy, and its modifications. Here while it is said, that philosophical knowledge is built upon notions, mathematical knowledge, on the contrary, is said to be built on the construction of notions.

But the study of mathematical demonstration is mainly recommended as a *practice of reasoning in general*; and it is precisely, as such a practice, that its inutility is perhaps the greatest.—General reasoning is almost exclusively occupied on *contingent* matter; if mathematical demonstration therefore supplies, as is contended, the best exercise of practical logic, it must do this by best enabling us to counteract the besetting tendencies to error, and to overcome the principal obstacles in the way of our probable reasonings. Now, the dangers and difficulties of such reasoning lie wholly,—i.) in its *form*,—ii.) in its *vehicle*,—iii.) in its *object-matter*. Of these severally.

i.)—As to the FORM:—*The study of mathematics educates to no*

* Epist. p. ii. ep. xxxiii.

† Observations on Sir Thos. Browne's *Religio Medici*, sub initio.

sagacity in detecting and avoiding the fallacies which originate in the thought itself of the reasoner.—Demonstration is only demonstration, if the necessity of the one contrary and the impossibility of the other be, from the nature of the object-matter itself, absolutely clear to consciousness at every step of its deduction. Mathematical reasoning, therefore, as demonstrative, allows no room for any sophistry of thought; the necessity of its matter necessitates the correctness of its form; and, consequently, it cannot forewarn and arm the student against this formidable principle of error. Mr Whewell, indeed, says, that—"In Mathematics the student is rendered familiar with the most perfect examples of strict inference; compelled habitually to fix his attention on those conditions on which the cogency of the demonstration depends; and in the *mistaken and imperfect attempts at demonstration* made by himself or others, he is presented with examples of the *most natural fallacies*, which he sees exposed and corrected." (P. 5.) We must be pardoned for observing that we should have wished the connexion of the first clauses of this sentence and the last, had been instructed by something better than an "and;" also that the novel assertions in this last itself had been explained and exemplified. Were the truth of our argument not sufficiently manifest of itself, we might appeal to the fact, noticed by *Aristotle* and confirmed by all subsequent experience, that of the sciences, mathematics alone have continued to advance without "shadow of turning," and even (as far as their proper objects are concerned) without dispute. Mathematics have from the first been triumphant over the husk; Philosophy is still militant for the kernel. Logic, therefore, as the doctrine of the form of reasoning, so valuable in every other subject, is practically valueless in mathematics; and, so far from "*forming logical habits better than logic itself*," as Mr Whewell intrepidly asserts, mathematics cannot in this relation conduce to "logical habits" at all. The art of reasoning *right* is assuredly not to be taught by a process in which there is *no reasoning wrong*. We do not learn to swim in water by previous practice in a pool of quicksilver. Yet, if mathematics are to be recommended as counteracting our natural tendency to err, why not also propose the mercury as counteracting our natural tendency to sink? Mr Coleridge (himself a Cantabrigian) is right, when he says:—"It is a great mistake to suppose geometry *any* substitute for logic." *

* Table Talk, i. 16.

Since writing the above, we have stumbled on the following passage of *Du Hamel*, not only a distinguished philosopher but a distinguished mathematician:—

"I do not find, that geometers are mighty solicitous whether their arguments be, in formula, compounded according to logical prescription; and yet there are none who demonstrate either more precisely or with greater conviction. For they usually follow the guidance of nature; descending step by step, from the simpler and more general to the more complex, and defining every term, they leave no ambiguity in their language. Hence it is, that *they cannot err in the form of their syllogisms*; for we seldom deviate from logical rules, except when we abuse the ambiguity of words, or attribute a different meaning to the middle term, in the major and in the minor proposition.—It is also the custom of geometers to prefix certain self-evident axioms or principles, from which all that they are subsequently to demonstrate flows.—Finally, their conclusions are deduced, either from definitions which cannot be called in question, or from those principles and propositions known by the light of nature, and styled axioms, or from other already established conclusions, which now obtain the cogency of principles. They make no troublesome inquiry into the mood or figure of a syllogism, *nor lavish attention on the rules of logic*; for such attention, by averting their mind from more necessary objects, would be detrimental rather than advantageous." *

[Arnauld has likewise some observations to the same effect.—Huygens and Leibnitz, indeed, truly observe, that mathematicians can, and sometimes do, err in point of form. But this aberration is rare and exceptional; it requires, indeed, a most ingenious stupidity to go wrong, where it is far more easy to keep right. A mathematical reasoning may certainly transgress in form, and a railway locomotive may go off the rails. But as a railroad conductor need not look ahead for ditches and quagmires, so a mathematician, in his process, is not compelled to be on guard against the fallacies which beset the route of the ordinary reasoner.]

But if the study of mathematics do not, as a logical discipline, warn the reason against the fallacies of thought, does it not, as an *invigorating exercise of reason* itself, fortify that faculty against their influence? To this it is equally incompetent. The principles of mathematics are self-evident; and every transition, every successive step in their evolution, is equally self-evident. But the mere act of intellect, which an intuitive proposition deter-

* (De Mente Humana, l. iii. c. 1. Opera, t. ii. p. 351.) See also, *instaur omnium*, Fonseca (In Metaph. Aristot. L. ii. c. 3, q. 4, sect. 3.) Leibnitz (Opera. t. ii. p. 17) commemorates the notable exploit of two zealous, but thick-headed logicians,—Herlinus and Dasypodius by name,—who actually reduced the first six books of Euclid into formal syllogisms.

mines, is of all mental energies the easiest,—the nearest, in fact, to a negation of thought altogether. But as every step in mathematical demonstration is intuitive, every step in mathematical demonstration calls forth an absolute minimum of thought; and as a faculty, is always evolved in proportion to its competent degree of exercise, consequently *mathematics, in determining reason to its feeblest energy, determines reason to its most limited development.*

In the inaction of this study, the mind, in fact, seldom rises to the full consciousness of self-activity. We are here passively moved on, almost as much as we spontaneously move. It has been well expressed :—“ *Mathematica munus pistrinarius est; ad molam enim alligati, vertimur in gyrum æque atque vertimus.*” The routine of demonstration, in the gymnastic of mind, may, indeed, be compared to the routine of the treadmill, in the gymnastic of body. Each determines a single power to a low but continuous action; all, not disabled in the ordinary functions of humanity, are qualified to take a part in either; but as few without compulsion are found to expatiate on the one, so few without impulsion are found to make a progress in the other. Both are conversant about the necessary; both depart from *data*; of both the procedure is by steps; and in both, the first step being conceded, the necessity of every other is shown on evidence equally intuitive. The one is ever moving, never advancing; the other ever varying to infinity only the expression of the same identity. Both are abstract occupations; and both are thought to disqualify for the world; for though both corrective disciplines, a prejudice prevails towards the one, against the *moral habits* of its votaries, towards the other, against their *moral reasoning*. Among many other correspondences, both, in fine, cultivate a single intellectual virtue; for both equally educate to a mechanical continuity of attention; as in each the scholar is disagreeably thrown out, on the slightest wandering of thought.

Nor is the extreme *facility of mathematics* any paradox. “No one, almost,” says *Cicero*, “seems to have intently applied himself to this science, who did not attain in it any proficiency he pleased;”* “Mathematics are the study of a *sluggish intellect*,” says “the *Helvetian Pliny* ;”† and *Warburton* calls “the routine

* De Oratore, L. i. c. 3.

† Zuingerus in Ethic. Nicom. L. vi. c. 9.

of demonstration the *easiest* exercise of reason, where much less of the *vigour* than of the *attention* of mind is required to excel."* With the Greeks in ancient, as with the school of Pestalozzi and others in recent, times, mathematics were drawn back to the primary elements of education. Among a hundred others, *Aristotle* observes, that not youths only, but *mere boys* easily become mathematicians, while yet incapable of practical or speculative philosophy.† And in regard to boys, it is acknowledged by *Niemeyer*, one of the highest authorities, in education, of our age, "to be a fact notorious in all schools, that the minds which manifest a partiality for this class of abstract representations, possess the feeblest judgment in reference to other matters."‡ "The mathematical genius" (says the learned *Bishop of Arranches*, an admirer of mathematics, and himself no contemptible geometer,) "requires much phlegm, moderation, attention, and circumspection. All, therefore, that goes to the formation of those brilliant minds, to whom has been conceded by privilege the title of *beaux-esprits*, I mean copiousness, variety, freedom, readiness, vivacity, —all this is directly *opposed* to mathematical operations, which are simple, slow, dry, forced, and necessary."§—[Finally, this extreme facility of the mathematical processes is not only promptly admitted by mathematical authors, but founded on by many of them as a strong recommendation of the study. Of these we need only mention, among many others, *Descartes*, *Wolf*, *Daries*, *Colerus*, *Horrebovius*, *Weidler*, *Lichtenberg*, &c. &c.; but to these it is unnecessary to give articulate references.]

This leads us to observe, that to minds of any talent, mathematics are *only difficult because they are too easy*.—Pleasure is the concomitant of the spontaneous and unimpeded energy of a faculty or habit; and Pain the reflex, either of the compulsion of a power to operation beyond its due limits, whether in continuance or degree, or of the compulsory repression of its spontaneous tendency to action. A study, therefore, will be agreeable, in proportion as it affords the conditions of an exercise, spontaneous and unimpeded, to a greater number of more energetic faculties; and irksome, in proportion as it constrains either to a too intense or too protracted activity, or to no activity at all. It is by reason of

* Julian, Pref. Works, iv. p. 345.

† Eth. Nic. L. vi. c. 8.

‡ Ueber Pestalozzi, 1810, p. 51. See also Klumpp, *ut supra*, vol. ii. p. 41.

§ Huetiana, ch. 123.

this principle that mathematics are found more peculiarly intolerable, by minds endowed with the most varied and vigorous capacities; for such minds are precisely those which the study mullets of the most numerous and vivid pleasures, and punishes with the largest proportion of intensest pains. It cannot, certainly, be said that the cultivation of these sciences fatigues a single faculty, by urging it to an activity at any moment too intense; in fact, they are felt as irksome, in a great measure, because they do not allow even the one power which they partially occupy, its highest healthy exercise. In mathematics we attain our end,—“*non vi sed sæpe cadendo.*” But the continued and monotonous attention they necessitate to a long concatenated deduction, each step in the lucid series calling forth, on the same eternal relation, and to the same moderate amount, the same simple exertion of reason;—this, added to the inertia to which they condemn all the nobler and more pleasurable energies of thought, is what renders mathematics, in themselves the easiest of all rational studies,—the most arduous for those very minds to which studies, in themselves most arduous, are easiest.

In mathematics dulness is thus elevated into talent, and talent degraded into incapacity.—“Those,” says the *Chian Aristo*, “who occupy themselves with Mathematics to the neglect of Philosophy, are like the wooers of Penelope, who, unable to attain the mistress, contented themselves with the maids.”*—*Hipponicus*, a mathematical genius, and general blockhead, of whom his pupil, the philosopher Arcesilaus, used to say, “that his science must have flown into his mouth when yawning,”† is the representative of a numerous class.—“The Mathematician is either a beggar, a dunce, or a visionary, or the three in one,” was long an *adage* in the European schools.‡—“*Lourd comme un géometre*”|| (Dull as a Mathematician) has also, by the confession of its objects, obtained a *proverbial currency* in the most mathematical nation of Europe.—“*A dull and patient intellect,*” says *Joseph Scaliger*, the most

* Stobæi Floril., Tit. iv. 110.—We accept, but do not pledge ourselves to defend, the interpretation of the universal Gesner. [Aristo should, perhaps, have been *Peripateticus*, not *Chius*. The saying is also attributed to *Plato* by *Pachymeres*; and to *Aristotle* by an authority in *Cramer's Anecdota Græca Parisiensia*, iv. 411.]

† Laert. L. iv. seg. 32.

‡ Alstedii Didactica, c. 12; and Muelleri Paræmisiæ Academicæ, p. 38.

|| Encyclopédie, t. iv. p. 627. Art. Geometre, par D'Alembert, (In Esprit, &c.)

learned of men,—“such should be your geometers. A great genius cannot be a great mathematician.”*—“We see,” says *Roger Bacon*, a geometer above his age, “that the very *rudest* scholars are competent to mathematical learning, although *unable* to attain to any knowledge of the other sciences.”†—On the other hand, to say nothing of less illustrious examples, *Bayle*, the impersonation of all logical subtilty, is reported by *Le Clerc* “to have confessed, that he *could never understand* the demonstration of the first problem of *Euclid*.‡—*Wolf* also, “the philologer,” the mightiest master of the higher criticism, as we are informed by his biographer and son-in-law, “was absolutely *destitute* of all mathematical capacity;” nay, “remained firmly convinced” (what, as gymnasiarch and professor, he had the amplest opportunities of verifying,) “that the more capable a mind for mathematics, the *more incapable* is it for the other noblest sciences.”||

We are far from meaning heroby to disparage the mathematical genius, which *invents* new methods and formulæ, or new and felicitous applications of the old; but this we assert,—that the most ordinary intellect may, by means of these methods and formulæ, once invented, reproduce and apply, by an effort nearly mechanical, all that the original genius discovered. The merit of a mathematical invention is, in fact, measured by the amount of thought which it supersedes. It is the highest compliment to the ingenuity of a *Pascal*, a *Leibnitz*, and a *Babbage*, in their invention of the arithmetical machine, that there would not be required, in those who use it, more than the dexterity of a turnspit. The algebraic analysis is not an instrument so perfect; it still requires a modicum of mind to work it.

Unlike their divergent studies, the inventive talents of the mathematician and philosopher, in fact, approximate. To metaphysical intellects, like those of *Descartes* and *Leibnitz*, mathematical discovery shows almost as an easy game. Both were illustrious inventors, almost as soon as serious students, of the science; and when the former, at the age of forty-two, published the work which, embodying his boyish discoveries, determines the grand æra in the progress of the modern analytic, he had *for*

* *Scaligerana Secunda*, p. 270, Ed. Des Maizeaux.

† *Opus Majus*, P. iv. c. 3.

‡ *Bibl. Choisie*, t. xii. p. 223.

|| *Kortum*, *Leben Wolfs des Philologen*. 1833. Vol. i. p. 23.

seventeen years, as he expressly tells us, completely forgotten even the elementary operations of arithmetic. Yet so far was the puerile play of the philosopher, in advance of the veteran effort of the mathematicians, that it is only about four years, since Fourier practically demonstrated, how a great principle of Descartes, previously unappreciated, affords the best and the most rapid method for the analysis of numerical equations.

ii.) In regard to the VEHICLE:—*Mathematical language, precise and adequate, nay, absolutely convertible with mathematical thought, can afford us no example of those fallacies which so easily arise from the ambiguities of ordinary language; its study cannot, therefore, it is evident, supply us with any means of obviating those allusions from which it is itself exempt.* The contrast of mathematics and philosophy, in this respect, is an interesting object of speculation; but, as imitation is impossible, one of no practical result.

iii.) In respect of the MATTER:—*Mathematics afford us no assistance, either in conquering the DIFFICULTIES, or in avoiding the DANGERS which we encounter in the great field of probabilities wherein we live and move.* Of these severally.

1.) As to the *difficulties*:—Mathematical demonstration is solely occupied in *deducing conclusions*; probable reasoning, principally concerned in *looking out for premises*.—All mathematical reasoning flows from, and—admitting no tributary streams,—can be traced back to its original source: principle and conclusion are convertible. The most eccentric deduction of the science is only the last ring in a long chain of reasoning, which descends, with adamantino necessity, link by link, in one simple series, from its original dependence.—In contingent matter, on the contrary, the reasoning is comparatively short; and as the conclusion can seldom be securely established on a single antecedent, it is necessary, in order to realise the adequate amount of evidence, to accumulate probabilities by multiplying the media of inference; and thus to make the same conclusion, as it were, the apex of many convergent arguments. (Compare Aristot. Anal. Post. I. 12, § 13.) In general reasoning, therefore, the capacities mainly requisite, and mainly cultivated, are the prompt acuteness which discovers what materials are wanted for our premises, and the activity, knowledge, sagacity, and research able competently to supply them.—In demonstration, on the contrary, the one capacity cultivated is that patient habit of suspending all

intrusive thought, and of continuing an attention to the unvaried evolution of that perspicuous evidence which it passively recognises, but does not actively discover. Of Observation, Experiment, Induction, Analogy, the mathematician knows nothing. [And accordingly, in the *applications* of his science, as in the theory of Probability, if the mathematician venture himself to prepare his premises,—to sift the facts to be thrown into his mill; he is sure almost to go wrong. The contingencies themselves should be left, in general, to other and more competent observation. As Kant has it:—"An imitation of the method of the mathematician, who paces on securely over a smooth and level road, and its application to the slippery ground of metaphysics, has been the cause of frequent stumbling. The mathematician can presuppose the definitions as universally recognized; the philosopher must first seek them out, and then demonstrate them." *]

What Mr Whewell, therefore, alleges in praise of demonstration,—“that the mixture of *various grounds of conviction*, which is so common in other men's minds, is rigorously *excluded* from the mathematical student's,” is precisely what mainly contributes to render it useless as an exercise of reasoning. In the practical business of life the geometer is proverbially but a child. And as regards the facts and theory of science: the *subtlety of mind*, the *multiformity of matter*, lie far beyond calculus and demonstration; mathematics are not the net in which *Psyche* may be caught, nor the chain by which *Proteus* can be fettered.

2.) As to the *dangers*:—How important soever may be the study of general logic, in providing us against the fallacies which originate both in the *form* and in the *vehicle* of reasoning, the error of our conclusions is, in practice, far less frequently occasioned by any vice in our logical inference from premises, than by the sin of a rash assumption of premises materially false. Now if mathematics, as is maintained, do constitute the true logical *catharticon*, the one practical *propædæutic* of all reasoning, it must of course enable us to *correct this the most dangerous and prevalent of our intellectual failings*. But, among all our rational pursuits, mathematics stand distinguished, not merely as affording us no aid towards alleviating the evil, but as actually inflaming the disease. The mathematician, as already noticed, is exclusively engrossed

* Beweisgrund für das Daseyn Gottes. Kl. Schriften II. 159.

with the deduction of inevitable conclusions, from *data* passively received ; while the cultivators of the other departments of knowledge, mental and physical, are for the most part, actively occupied in the quest and scrutiny, in the collection and balancing of probabilities, in order to obtain and purify the facts on which their premises are to be established. *Their* pursuits, accordingly, from the mingled experience of failure and success, have, to them, proved a special logic, a practical discipline,—on the one hand, of skill and confidence, on the other, of caution and sobriety : *his*, on the contrary, have not only not trained him to that acute scent, to that delicate, almost instinctive, tact which, in the twilight of probability, the search and discrimination of its finer facts demand ; they have gone to cloud his vision, to indurate his touch, to all but the blazing light and iron chain of demonstration, leaving him, out of the narrow confines of his science, either to a passive credulity in any premises, or to an absolute incredulity in all.

Before, however, proceeding articulately to show how, in different dispositions, these opposite vices are, both, the natural consequences of the same common cause, we may first evince that our doctrine in regard to the general tendency of mathematical study is the universal opinion of those who, from their knowledge and their powers of observation, are the best qualified to pronounce a judgment. We quote the authorities that chance to linger in our recollection ; a slight research might multiply them without end.

On such a question, we, of course, prefer the testimony of *mathematicians* themselves ; they shall constitute our *prior* class ; and under this head we include those only who have distinguished themselves by mathematical publications.

Of these, the *first* whom we shall adduce is that miracle of universal genius—*Pascal* :—

“ There is a great difference between the *spirit of Mathematics** and the *spirit of Observation*. †—In the *former*, the principles are palpable, but remote from common use ; so that from want of custom it is not easy to turn

* In the original—*l'esprit de Geometrie*. *Geometrie*, as is usual in French, is here employed by Pascal for mathematics in general.

† In the original—*l'esprit de Finesse*. It is impossible to render this quite adequately in English. *Fine* is here used for *acute*, *subtle*, *observant* ; and *esprit de finesse* is nearly convertible with *spirit of acute observation*, applied especially to the affairs of the world. But as the expressions *observant* and *spirit of observation* with us actually imply the adjective, the repetition of which would be awkward, we have accordingly translated the original by these alone.

our head in that direction; but if it be thus turned ever so little, the principles are seen fully confessed, and it would argue a mind incorrigibly false, to reason inconsequently on principles so obtrusive, that it is hardly possible to overlook them.—But, in the *field of observation*, the principles are in common use, and before the eyes of all. We need not to turn our head,—to make any effort whatsoever. Nothing is wanted beyond a good sight: but good it must be; for the principles are so minute and numerous, that it is hardly possible but some of them should escape. The omission, however, of a single principle, leads to error; it is, therefore, requisite to have a sight of the clearest, to discern all the principles; and, then, a correct intellect to avoid false reasonings on known principles.—All mathematicians would, thus, be observant, had they a good sight; for they do not reason falsely on the principles which they know; and minds of observation would be mathematical could they turn their view towards the unfamiliar principles of mathematics.—The cause why certain observant minds are not mathematical, is, because they are wholly unable to turn themselves towards the principles of mathematics; *but the reason why there are mathematicians void of observation, is, that they do not see what lies before them; and that accustomed to the clear and palpable principles of mathematics, and only to reason after these principles have been well seen and handled, they lose themselves in matters of observation, where the principles do not allow of being thus treated.* These objects are seen with difficulty; nay, are felt rather than seen; and it is with infinite pains that others can be made to feel them, if they have not already felt them without aid. They are so delicate and numerous, that to be felt they require a very fine and a very clear sense. They can also seldom be demonstrated in succession as is done in mathematics; for we are not so in possession of their principles, while the very attempt would, of itself, be endless. The object must be discovered at once, by a single glance, and not by course of reasoning,—at least up to a certain point. *Thus it is rare, that mathematicians are observant, or that observant minds are mathematical:* because mathematicians would treat matters of observation by rule of mathematic; and make themselves ridiculous by attempting to commence by definitions and by principles,—a mode of procedure incompatible with this kind of reasoning. It is not, that the mind does not perform the process; but performs it silently, naturally, and artlessly: for its expression surpasses all men, and the consciousness of it appertains to few.—On the other hand, minds of observation, habituated to form their judgments at a single glance, are so amazed when propositions are laid before them, whereof they comprehend nothing, and wherein to enter, it behoves them to pass through definitions and barren principles, which they are also unaccustomed thus to consider in detail,—that they are revolted and disgusted. But false minds, they are never either observant or mathematical.—Mathematicians, who are mere mathematicians, have thus their understanding correct, provided always that every thing be well explained to them by definition and principle: *otherwise they are false and insupportable; for they are correct only upon notorious principles.*—And minds of observation, if only observant, are incapable of the patience to descend to the first principles of matters speculative and of *imagination*, whereof they have had no experience in the usage of the world.”*

* *Pensées*, I. Partie, art. 10, sect. 2.

Berkeley is our *second* mathematician. He asks, and his queries are intended to be answered in the negative:—

*"Whether tedious calculations in algebra and fluxions be the likeliest method to improve the mind?—Whether men's being accustomed to reason altogether about mathematical signs and figures, doth not make them at a loss how to reason without them?—Whether whatever readiness analysts acquire in stating a problem, or finding apt expressions for mathematical quantities, the same doth necessarily infer a proportionable ability in conceiving and expressing other matters?"**

S^r Gravesande, our *third* mathematical testimony, after praising geometry, as an useful exercise of intelligence, inasmuch as its principles are simple, its conclusions undoubted, and as it ascends from the easiest and simplest to the more difficult and more complex; and the method of analysis, as cultivating the invention, from the necessity it imposes of discovering the intermediate terms requisite for bringing given extremes into comparison, (this advantage, be it noticed, cannot be allowed to the *mere study* of the method,) proceeds:—

"But it is not sufficient to have applied the mind to one science; the more widely different among themselves are the ideas which the Intellect acquires, and concerning which it reasons, the more expanded becomes its intelligence. In the mathematical sciences, by a well ordered exercise, the above-mentioned faculties are improved. But there is required, moreover, that these same faculties should be exercised upon ideas, now of one kind, now of another, and different from mathematical. Those who are habituated to the consideration of ideas of a single class, however skilful they may be in the handling of these, reason absurdly upon other matters. A pliant genius ought to be acquired; and this is only to be compassed by applying the mind to a plurality of studies, wholly different from each other. . . . We ought to be peculiarly attentive to this,—that the mind be inured to abstract consideration. Where ideas are to be compared, things are never more clearly illustrated than when we examine these ideas separately from all others. In such an exercise of mind the study of metaphysics is peculiarly useful, provided that all confused ideas be removed, and the others expounded in a natural order."†

D'Alembert is the *fourth* mathematical authority.

"It seems as if great mathematicians ought to be excellent metaphysicians, at least upon the objects about which their science proper is conversant; nevertheless, this is very far from being always the case. The logic of some of them is comprehended in their formulae, and does not extend beyond. The case resembles that of a man who has the sense of sight contrary to that of touch, or in whom the latter of these senses is only perfected at the expense of the former. These bad metaphysicians in a science in which it is so easy not to reason wrong, would infallibly be much worse, as experience proves, on matters in which they had not the calculus for a guide."‡

* Analyst, Qu. 38, 39.

† Introductio ad Philosophiam, &c., § 887, sq.

‡ Elémens de Philosophie, c. 15.

[*Lichtenberg*, the celebrated Professor of Mathematics and Physics in Göttingen, but who was also something better, being one of the wittiest writers and most philosophical thinkers of his country, is our *fifth* mathematical authority. After stating that "Mathematics are not only the most certain of all human sciences, but also the *easiest*," he makes the following observation:—

"Mathematics are a noble science, but *as for the mathematicians, they are often not worth the hangman*. It is nearly the same with mathematics as with theology; for, as those who apply themselves to the latter, especially if they once obtain an office, forthwith arrogate to themselves the credit of peculiar sanctity and a closer alliance with God, though very many among them are in reality but good-for-nothing subjects; in like manner, he who is styled a mathematician very frequently succeeds in passing for a *deep thinker*, although under that name are included the *veriest dunderheads* (die grössten Plunderköpfe) in existence, incapable of any business whatsoever which requires *reflection*, since this cannot be immediately performed by the *easy* process of connecting symbols, which is more the product of routine than of thought."*]

To this category we may also not improperly refer, as a *sixth* witness, *Dugald Stewart*: for though not an author in mathematical science,† he was in early life a distinguished professor of mathematics; whilst his philosophical writings prove that, to the last, he had never wholly abandoned the professional studies of his youth. In other respects, it is needless to say that his authority is of the highest.

"How accurate soever the logical process may be, if our first principles be rashly assumed, or if our terms be indefinite and ambiguous, there is no absurdity so great that we may not be brought to adopt it; and it unfortunately happens that, while mathematical studies exercise the faculty of reasoning or deduction, they give no employment to the other powers of the understanding concerned in the investigation of truth. On the contrary, they are apt to produce a *facility in the admission of data*, and a circumscription of the field of speculation by partial and arbitrary definitions. . . . When the mathematician reasons upon subjects unconnected with his favourite studies, he is *apt to assume*, too confidently, certain intermediate principles as the foundation of his arguments. Of this many examples might be

* [Vermischte Schriften, II., p. 287, 1st ed.—I had resolved to add no new authorities to those which the article originally contained; both because, in fact, these were perhaps superabundant, and because there need be no end to additions, if any be allowed. But this and those of Vives had been intended for the article; in the haste, however, with which it was prepared, they were overlooked, until too late for insertion.]

† [This I find is hardly correct. For he was the author of a memoir on *Porisms*, if not of other mathematical contributions to the Edinburgh Royal Society.]

quoted from the works of those geometricians and algebraists, who, without the advantages of a very liberal education, or of an extensive commerce with the world, have ventured to speculate on questions beyond the limits of their ordinary pursuits. A very respectable mathematician [*M. Ozanam*, as recorded by Fontenelle] of the Roman Catholic persuasion, seems to have felt somewhat of this bias in himself, when he excused himself from intermeddling with theological disputes, by saying, 'That it was the business of the Sorbonne to discuss; of the Pope to decide; and of the Mathematician to go to Heaven in a perpendicular line.' . . . I think I have observed a peculiar proneness in mathematicians, on occasions of this sort, to *avail themselves of principles sanctioned by some imposing names, and to avoid all discussion which might lead to an examination of ultimate truths, or involve a rigorous analysis of their ideas.*"*

And much more to the same effect, which we do not quote, as the work is, or ought to be, in the hands of every one to whom a discussion like the present can be of any interest.

The *other* authorities we shall take also in the order of time.

Among the apophthegms of *Diogenes* of Sinope, it is recorded, "that he reproached the mathematicians for looking away upon the sun and the moon, whilst *overlooking* what lay under their very feet."†

[The testimonies of *Ludovicus Vives*, are valuable alike for the high authority of the witness, and for the number of points to which his evidence applies. He says:—

"These arts [the mathematical] as they appertain to use, so if use be superseded, are elevated to matters *wholly profitless*, affording only a sterile contemplation and inquiry without end, in as much as step determines step to an infinite series: and whilst the rudiments of these disciplines, and a certain legitimate progress in their study, aids, sharpens, and delights the mind; so their intense and assiduous exercise *constitutes the torture* (carnificinæ) *of noble intellects,—of those born for the benefit of mankind.*"‡

"Minds volatile and restless, prone to self-indulgence, and incapable of the labour of an unremitted attention, are vehemently abhorrent from these studies. For they tie down the intellect, compel it to do this or that, and permit it not to wander to any other object. Persons of an oblivious memory are, likewise, disqualified; for if the previous steps be forgotten, not a hundredth of the others can be retained,—such, in these sciences, is the series and continuous concatenation of the proofs. And for this reason, they *very soon slip from the mind*, unless beaten in by frequent exercise. Those ill adapted for the other and more agreeable, are frequently the subjects peculiarly fitted for these severe and repulsive studies. But such knowledge, if any one continue to indulge himself therein, is without end; whilst its sedu-

* Elements of the Philosophy of the Human Mind, iii. pp. 271, 288, 290.

† Laert. VI. scg. 28.

‡ [De Causis corruptarum artium. L. v. c. De Mathematicis.]

lous pursuit leads away from the business of life, and even deprives its votaries of common sense."]*

After Sir Kenelm Digby, already quoted, (p. 284,) and to whom we here again refer, the next is that of *Sorbiere*, Historiographer Royal of France, who, if not a mathematical author himself, was the intimate friend of the most distinguished mathematicians of his age,—as Gassendi (of whose philosophy he was acknowledged even by Bernier to be the most accomplished disciple), Mersenne, Fermat, Carcavi, &c. Speaking of Gassendi's disregard of the higher geometry and algebra, and of his valuing mathematics in general, only as the instrument of more important sciences, he says:—

"It is certain that the abstrusest Mathematics do not much conduce, to say nothing worse of them, to the acquisition of right reasoning and the illustration of natural phenomena; as every one is aware that mathematicians, distinguished in the higher branches of their science, are sometimes none of the most clear-sighted in matters beyond its province."†

(And in another work):—"It is an observation which all the world can verify, that there is nothing so deplorable as the conduct of some celebrated mathematicians in their own affairs, nor any thing so absurd as their opinions on the sciences not within their jurisdiction. I have seen of them, those who ruined themselves in groundless lawsuits; who dissipated their whole means in quest of the philosopher's stone; who built extravagantly; who embarked in undertakings of which every one foresaw the ill success; who quaked for terror at the pettiest accident in life; who formed only chimeras in politics; and who had no more of our civilisation than if born among the Hurons or the Iroquois."—(After a curious example.) "Hence, sir, you may form some judgment of how far algebra conduces to common sense, when the question is not about an affair of figures, and if there be not reason to believe that its abstractions are themselves of a noxious influence in the commerce of the world. They are too minute for the ordinary usage of civil society; and it is requisite to incorporate them with something less spiritual, in order that the thought may not be so piercing, so decisive, and so difficult to control."‡

Clarendon:—

"The Earl of Leicester was a man of great parts, very conversant in books, and much addicted to the mathematics; but though he had been a soldier, and commanded a regiment in the service of the states of the United Provinces, and was employed in several embassies, as in Denmark and France, was, in truth, rather a speculative than a practical man, and expected a greater certitude in the consultation of business, than the business of this world is capable of, which temper proved very inconvenient to him through the course of his life."||

* [De tradendis disciplinis. L. iv.]

† Vita Gassendi; Præf. Operum Gassendi.

‡ Lettres, let. lxxviii.

|| History, &c. vol. ii., p. 153, Ed. 1704.

Le Clerc:—

"There is also sometimes to be considered so great a number of Modes and Relations, and these so minute, that they cannot, without a far greater expense of time than we can afford them, be arranged in geometrical order. And yet to form a correct judgment in regard to these, is a matter of much greater importance to us than concerning mathematical problems. Such are the various affections of the minds of men and of the affairs of life, concerning which, the *most expert geometers do not judge better than their neighbours, nay, frequently worse*. It is a question, for instance, whether a certain plan or undertaking is to have a prosperous result. In that undertaking there are a multitude of ideas which cannot be brought to an issue unless in a great variety of ways, which again depend on innumerable circumstances. *Those accustomed to mathematical ideas, which are very easily observed, and very easily discriminated from each other, when, by the rules of their science they attempt to judge of the administration of public or private affairs, arrive at conclusions the most absurd*. For they take into account only the abstract possibilities, omitting in their reasonings certain dispositions of things and persons, which by their multiplicity and minuteness, almost elude the acutest observation. It also happens, for the most part, that they who judge correctly in regard to such matters are wholly wrong in regard to mathematical questions, if, indeed, they do not eschew them as difficult, and alien from their habits." *

Buddeus:—

"Such is the nature of the human mind, that, if habituated to certain kinds of thought, it cannot forthwith divest itself thereof, when passing to the consideration of other objects, but conjures up notions concerning these, analogous to those already irradiated in it by custom. This is the real cause of errors almost infinite. Thus they, who inconsiderately *carry over mathematical notions into morals and theology, seem to themselves to find in these new sciences the same necessary connexion which they discovered in the old*." †

Barbeyrac, speaking of the notes on *Grotius De Jure Belli, &c.* by *Feldenus*, professor of mathematics at Helmstadt, of which *Salmasius* "had promised mountains and marvels," says:—

"Never was there seen aught more wretched; and we might be surprised that a *mathematician could reason so ill*, had we not other, and far more illustrious examples, which clearly evince, that the *study of the mathematics does not always render the mind more correct in relation to subjects beyond the sphere of these sciences*." ‡

Warburton:—

"It may seem, perhaps, too much a paradox to say, that long habit in this science (*mathematics*) *incapacitates the mind for reasoning at large, and especially in the search of moral truth*. And yet, I believe, nothing is more certain. The object of geometry is demonstration, and its subject admits of it, and is

* *Clerici Logica*, Pars. iii. c. 3, §§ 13, 14.

† *Isagoge Historico-Theologica*, l. i., c. 4.

‡ Preface to his *Grotius*, t. i., p. ix., Ed. 1724.

almost the only one that doth. In this science, whatever is not demonstration is nothing, or, at least, below the sublime inquirer's regard. *Probability*, through its almost infinite degrees, from simple ignorance up to absolute certainty, is the *terra incognita of the geometrician*. And yet here it is, that the *great business of the human mind* is carried on,—the search and discovery of all the important truths which concern us as reasonable creatures. And here too it is, that *all its vigour is exerted*; for to proportion the assent to the probability accompanying every varying degree of moral evidence, requires the *most enlarged and sovereign exercise of reason*. *But the harder the use of any thing, the more of habit is required to make us perfect in it*. Is it then likely that the *geometer*, long confined to the routine of demonstration, the *easiest exercise of reason*, where much less of the *vigour* than of the *attention* of mind is required to excel, should form a right judgment on subjects whose truth or falsehood is to be rated by the probabilities of moral evidence?"*

Basedow :—

"*Mathematics tolerate no reasoning from analogy*. Of the coarservation of proofs from many probable grounds; of arguments from the certainty and adaptation of thought; of the collision of proofs; of useful probabilities; of exceptions from ordinary truths in extraordinary circumstances,—of all these they take no account. Every thing, on the contrary, is determinately certain from the commencement; of exceptions no mathematician ever dreams. *But is this character of thought applicable to the other branches of our knowledge?* The moment we attempt to treat logic, morals, theology, medicine, jurisprudence, politics, criticism, or the theory of the fine arts in this mathematical method, we play the part, not of philosophers but of *dreamers*, and this to the great detriment of human reason and happiness," &c. &c.†

Hamann, "The Magus of the North," one of the shrewdest of thinkers, has many observations pertinent to our purpose. The following are samples :—

"With mathematicians, who are not philosophers, it evermore comes to pass as with the Samaritans :—*'they worship what they themselves know not.'*"—Again : "A mere empirical dexterity in the employment of the algebraic calculus, is at heaven's distance from a genuine mathematic."—Again : "The *transcendent ignorance* of mathematicians and astronomers, in matters, partly lying outwardly beneath their feet, partly, were they capable of observation, inwardly reflected from the intellect and heart,—makes us reasonably suspicious of their competence to report touching the distant matters of the mighty science which they profess."—Finally : "At all events, we have no need of their observations and reckonings in evidence of religious truths; these serve only to afford us a notion of the abyss of human ignorance."‡

Walpole :—

"*The profound study of mathematics seems to injure the more general and*

* Julian, Pref. p. xlix., Works, vol. iv., p. 345.

† Philaethie, Bd. ii., § 179.

‡ Roth's Sammlung der Hamannischen Schriften, vi. 366, li. 174, iv. 25, 19.

useful mode of reasoning—that by induction. Mathematical truths being, so to speak, *palpable*, the moral feelings become less sensitive to impalpable truths. As when one sense is carried to great perfection, the others are usually less acute, so mathematical reasoning seems, in some degree, to *injure the other modes of ratiocination.*"*

Gibbon :—

"From a blind idea of the usefulness of such abstract science, my father had been desirous, and even pressing, that I should devote some time to the Mathematics; nor could I refuse to comply with so reasonable a wish. During two winters I attended the private lectures of M. de Traytorrens, who explained the elements of algebra and geometry, as far as the conic sections of the Marquis de l'Hôpital, and appeared satisfied with my diligence and improvement. But as my childish propensity for numbers and calculations was totally extinct, I was content to receive the passive impressions of my professor's lectures, without any active exercise of my own powers. As soon as I understood the principles, I relinquished for ever the pursuit of the mathematics; nor can I lament that I desisted *before my mind was hardened by the habit of rigid demonstration, so destructive of the finer feelings of moral evidence*, which must, however, determine the actions and opinions of our lives."†

Kirwan :—

"Some have been led to imagine,—'that the true way of acquiring a habit of reasoning closely, and in train, is to exercise ourselves in mathematical demonstrations; that having got the way of reasoning which that study necessarily brings the mind to, they may be able to transfer it to other parts of knowledge as they shall have occasion.' This, however, is an egregious mistake; the mode of reasoning of mathematicians being founded on the relation of identity or equality, is not transferable to any other science into which mathematical considerations do not enter, as ethics, jurisprudence, whether natural or municipal, medicine, chemistry, theology, metaphysics, &c., which are founded on relations entirely different. On the contrary, *the habit of mathematical reasoning seems to unfit a person for reasoning justly on any other subject*; for, accustomed to the highest degree of evidence, a mathematician frequently becomes insensible to any other."‡

De Staël :—

"The study of languages, which in Germany constitutes the basis of education, is much more favourable to the evolution of the faculties, in the earlier age, than that of mathematics, or of the physical sciences. Pascal, that great geometer, whose profound thought hovered over the science which he peculiarly cultivated, as over every other, has himself acknowledged the *insuperable defects of those minds which owe their first formation to the mathematics.* This study, in the earlier age, exercises only the *mechanism of intelligence.* In boys, occupied so soon with calculations, the spring of imagination, then so fair and fruitful, is arrested; and they acquire not in its stead, any pre-eminent accuracy of thought,—for arithmetic and algebra are limited

* Walpoliana, vol. i., p. 113.

† Life in Miscellaneous Works, vol. i., p. 92, Ed. 1814.

‡ Logick, vol. i., Pref. p. iil.

to the teaching, in a thousand forms, propositions always identical. The problems of life are more complicated; not one is positive, not one is absolute; we must conjecture, we must decide by the aid of indications and assumptions, which bear no analogy with the infallible procedure of the calculus. *Demonstrated truths do not conduct to probable truths*; which alone, however, serve us for our guide in business, in the arts, and in society. There is, no doubt, a point at which the mathematics themselves require that luminous power of invention, without which it is impossible to penetrate into the secrets of nature. At the summit of thought the imaginations of Homer and of Newton seem to unite; but how many of the young, without mathematical genius, consecrate their time to this science! There is exercised in them only a *single faculty*, whilst the *whole moral being* ought to be under development at an age when it is so easy to derange the soul and the body in attempting to strengthen only a part. *Nothing is less applicable to life than a mathematical argument*. A proposition, couched in ciphers, is decidedly either true or false. In all other relations the true and the false are so intermingled, that frequently instinct alone can decide us in the strife of motives, sometimes as powerful on the one side as on the other.*

We have already noticed in general that, beyond the narrow sphere of necessary matter, mathematicians are disposed to one or other of two opposite extremes,—*credulity* and *scepticism*. The cause is manifest.

Both extremes.—Alienated, by the opposite character of their studies, from those habits of caution and confidence, of skill and sagacity, which the pursuit of knowledge in the universe of probability requires and induces; they are constrained, when they venture to speculate beyond their diagrams and calculations, *either*, to accept their facts, on authority, if not on imagination,—*or*, to repudiate altogether, as unreal, what they are themselves incapable of verifying. These opposite dispositions are not, however, incapable of conjunction; they are indeed often united in the same individual, but in relation to different objects.

This twofold tendency of mathematical study has frequently been noticed. In reference to philosophy, it is observed by *Salat*, a distinguished German metaphysician:—

"The study of mathematics, unless special precaution be taken, is *rather a hindrance than an aid*.—For, in so far as the mathematician, accustomed to his own mode of thinking, and ignorant of any other, applies, or does not apply it to the supersensible,—what must follow? In the *former* case, the supersensible world is denied, inasmuch as it cannot be mathematically demonstrated; and, in the *latter*, affirmed only on the ground of feeling and imagination. Thus, on the one alternative, the mathematician becomes necessarily a *Materialist*; on the other, a *Mystic*."[†]

* De l'Allemagne, t. i. c. 18. p. 163.

† Grundzuge der allgemeiner Philosophie; by J. Salat, Ordinary Professor of Moral Philosophy in the University of Landsht, &c. 1820.

Credulity.—Of the two extremes, that of *credulity*, as relative, at least, to the affairs of life, is by far the more frequent and obtrusive. *Mr Dugald Stewart* seems even not indisposed to explain the apparent manifestations of the opposite tendency, on the ground of credulity alone. He says:—

"In the course of my own experience, *I have never met with a mere mathematician who was not credulous to a fault*: credulous not only with respect to human testimony, but credulous also in matters of opinion; and prone, on all subjects which he had not carefully studied, to repose too much faith in illustrious and consecrated names. . . . The atheism and materialism professed by some late mathematicians on the Continent, is, I suspect, in many cases, to be ascribed to the very same cause; a credulity yielding itself up as blindly to the fashionable disbelief of the day, as that of their predecessors submitted itself to the creed of the Infallible Church."*

Our limits, we regret, preclude us from adverting to *Mr Stewart's* ingenious suggestion of one cause, at least, of the disposition shown by mathematicians to *fanaticism*; but we shall quote his testimony to the phenomenon.

"It is a certain fact, that, in mathematicians who have confined their studies to mathematics alone, there has often been observed a proneness to that species of *religious enthusiasm in which imagination is the predominant element, and which, like a contagion, is propagated in a crowd*. In one of our most celebrated universities, which has long enjoyed the proud distinction of being the principal seat of mathematical learning in this island, I have been assured, that if, at any time, a spirit of fanaticism has infected (as will occasionally happen in all numerous societies) a few of the unsound limbs of that learned body, the contagion has invariably spread *much more widely among the mathematicians than among the men of erudition*. Even the strong head of *Waring*, undoubtedly one of the ablest analysts that England has produced, was not proof against the malady, and he seems at last (as I was told by the late *Dr Watson*, Bishop of Llandaff) to have sunk into a deep religious melancholy, approaching to insanity.—When *Whitefield* first visited Scotland, and produced by his powerful though unpolished eloquence such marvellous effects on the minds of his hearers, *Dr Simson*, the celebrated professor of mathematics at Glasgow, had the curiosity to attend one of his sermons in the fields; but could never be persuaded, by all the entreaties of his friends, to hear another. He had probably felt his imagination excited in an unpleasant degree, and with his usual good sense, resolved not to subject himself to the danger of a second experiment. I have observed, too, upon various occasions, the effects of dramatic representations on persons who had spent their lives among calculations and diagrams; and have generally found them much more powerful than upon men devoted to the arts which are addressed to the imagination."†

On this principle of facile credence, it is to be explained why of

* *Elements*, vol. iii. pp. 271, 280.

† *Ibid.* p. 291.

metaphysicians, the most fanciful and most confident speculators have been usually the most mathematical. Pythagoras, Plato, Cardan, Descartes, Malebranche, and Leibnitz, are names not more distinguished for their philosophical genius than for their philosophical credulity. Conversant, in their mathematics, only about the relations of ideal objects, and exclusively accustomed to the passive recognition of absolute certainty, they seem in their metaphysics almost to have lost the capacity of real observation and of critically appreciating comparative degrees of probability. In their systems, accordingly, hypothesis is seen to take the place of fact; and reason, from the mistress, is degraded into the hand-maid of imagination.

"Mathematical science," says the marvellous *Prince of Mirandola*, "*does not bestow wisdom*: it was therefore, by the ancients, made the discipline of boys. On the contrary, though preparing for philosophy, if *previously sipped in moderation*, when raised to an object of exclusive study, it affords the *greatest occasions of philosophical error*. To this Aristotle bears evidence." *

"Descartes," says *Voltaire*, "*was the greatest mathematician of his age; but mathematics leave the intellect as they find it*. That of Descartes was too prone to invention. He preferred the divination to the study of nature. The first of mathematicians produced nothing almost but romances of philosophy." † A more felicitous expression had been preoccupied by Father Daniel;—"The philosophy of Descartes is the romance of nature." But in fact, Descartes himself was author of the *mot*:—"My theory of vortices is a philosophical romance."

In regard to Leibnitz, even his intelligent and learned friend, the *first Queen of Prussia*, was not blind to the evil influence of his mathematics on his philosophy. She was wont to say, with an eye to the "Pre-established Harmony" and "Monads,"—"that, of all who meddled with philosophy, the mathematicians satisfied her the least, more especially when they attempted to explain the origin of things in general, or the nature of the soul

* Joannes Picus Mirandulanus in *Astrologiam*, l. xii. c. 2. He is still more decided in his *Conclusions*:—"There is nothing more hurtful to a divine than a frequent and assiduous exercise in the mathematics of Euclid." (lxxxv. 6.) See also his nephew's (John Francis) *Examen Vanitatis Doctrinæ Gentium*, l. iii. c. 6.

† *Le Siècle de Louis*, xiv. c. 29.

in particular; and that she was surprised, that, *notwithstanding their geometrical exactness, metaphysical notions were, for most of them, lost countries, and exhaustless sources of chimeras.**

"There are four celebrated metaphysicians," says *Condillac*,—"Descartes, Malebranche, Leibnitz, and Locke. The last alone was not a mathematician, and yet, how greatly is he superior to the other three!" † (This may be disputed.)

But, if such be even the *metaphysical*, what, out of their sciences, are *other mathematicians*? It is enough to say, that Astrology was the least visionary of *Kepler's* beliefs,—its study indeed first turned *Newton* to Astronomy: whilst besides *Newton*, *Napier* and *Whiston* sought, and found their fancies in the Apocalypse,—a book of which South, a great Anglican divine, has said, that, "it either finds a man mad, or leaves him so."

The causes that determine the mathematician to an irrational belief, determine him also to an *irrational confidence in his opinions*.

Poirot, that deep-thinking mystic, truly observes:—

"From the same source, *mathematicians are also infested with an overweening presumption or incurable arrogance*; for, believing themselves in possession of demonstrative certainty in regard to the objects of their peculiar science, they persuade themselves that, in like manner, they possess a knowledge of many things beyond its sphere. Then, co-ordinating these with the former, as if demonstrated by equal evidence, they spur every objection to every opinion, with the contempt or indignation they would feel at an endeavour to persuade them that two plus two are not four, or that the angles of a triangle are not equal to two right angles," &c.‡

Warburton :—

"Besides this acquired inability [p. 299], prejudice renders the veteran mathematician still less capable of judging of moral evidence. He who hath been so long accustomed to lay together and compare ideas, and hath reaped demonstration, the richest fruit of speculative truth, for his labour, regards all the lower degrees of evidence as in the train only of his mathematical principality; and he commonly ranks them in so arbitrary a manner, that the *ratio ultima mathematicorum* is become almost as great a *libel upon common sense as other sovereign decisions*. I might appeal for the truth of this to those wonderful conclusions which geometers, when condescending to write on history, ethics, or theology, have made of their premises. But the thing is notorious; and it is no secret, that the *oldest Mathematician in England is the worst reasoner in it.*" ||

* Hist. Crit. de la Republique des Lettres, t. xi. p. 128.

† L'Art de Penser, (Cours. t. lii. p. 398, Ed. 1780.) Œuvres Philosophiques, t. vi. p. 225. Ed.

‡ De Eruditione Solida, &c. Ed. 1692, p. 306.

|| Julian, Pref. p. xx.; Works, iv. p. 346.

De Staël :—

"The study of mathematics, habituating us to certainty, inflames us against all opinions in contradiction with our own," &c.*

Dugald Stewart :—

"The bias now mentioned, is strengthened by another circumstance,—the confidence which the mere mathematician naturally acquires in his powers of reasoning and judgment,—in consequence of which, though he may be prevented in his own pursuits from going far astray, by the absurdities to which his errors lead him, *he is seldom apt to be revolted by absurd conclusions in the other sciences. Even in physics, mathematicians have been led to acquiesce in conclusions which appear ludicrous to men of different habits.*—Thus, in the *Mechanics of Euler*, that illustrious man, after arriving at a result, which startled his own common sense from its apparent extravagance, professes, nevertheless, in the following memorable words, his implicit faith in the infallibility of the algebraic art: '*Sed potius calculo Algebraico quam nostro judicio est fidendum.*' The intrepidity with which the earliest writers on the arithmetic of infinites followed out their principles to the most paradoxical and revolting conclusions, affords a still more palpable illustration of the above remark. The following instances of a misapplication of mathematical principles, are mentioned by the first mathematician of the present age. 'I rank also in the number of illusions, the application which *Leibnitz* and *Daniel Bernoulli* have made of the calculus of probabilities to the summation of series. If we reduce the fraction, whose numerator is 1, and whose denominator is $1 + x$ to a series, whose terms are arranged according to the powers of x ; it is easy to see, that, supposing $x = 1$, the fraction becomes $\frac{1}{2}$; and the series becomes $1 - 1 + 1 - 1$ &c., &c. By adding the two first terms, the two next, and so of the rest, we transform the series into another having each term = Zero. Hence *Grandi*, an Italian Jesuit, had inferred the possibility of the Creation; because the series being always equal to $\frac{1}{2}$, he saw that fraction created out of an infinity of Zeros; that is, out of nothing. [*Grandi's* inference amounts to this, that an infinite series of nothings is equal to one-half.] It was thus that *Leibnitz* saw an image of the Creation in his binary arithmetic, where he employed only two characters, Zero and Unity. He imagined that Unity might represent God, and Zero, nothing; and that the Supreme Being might have brought all things out of nothing, as Unity with Zero expresses all numbers in this system of arithmetic. This idea pleased *Leibnitz* so much, that he communicated the remark to the Jesuit *Grimaldi*, president of the Mathematical Board in China, in the hope that this emblem of the creation would convert to Christianity the reigning emperor, who was particularly attached to the sciences. I record this anecdote only to show how far the prejudices of infancy may mislead the greatest men.' (*Laplace*). Some other examples of the same thing might, if I do not greatly deceive myself, be produced even from the *Philosophical Essay on Probabilities*." (Omitting the curious illustration in *Sir John Leslie*, Mr Stewart proceeds:—) "These inconvenient effects of mathematical studies are to be cured only by an examination of the circumstances

* De l'Allemagne, i. c. 18.

which discriminate mathematics from the other sciences; and which enable us, in that branch of knowledge, to arrive at demonstrative certainty, while, in the others, nothing is to be looked for beyond probability. Had these circumstances been duly weighed by *Pitcairn* and *Cheyne*, they would never have conceived the extravagant project of compensating, by the rigour of a few mathematical steps, for the uncertainty which must necessarily attend all our data, when we reason on medical subjects. 'Non dubito' (says the former of these writers) 'me solvisse nobile problema, quod est, dato morbo, invenire remedium. Jamque opus exegi.' Other attempts, still more absurd, have been made to apply mathematical reasoning to morals.*

Disbelief.—The opposite bias,—the *scepticism* of the mathematician, is principally relative to the spiritual or moral world. His studies determine him to this in two ways.—In the *first* place, by abstracting him from the view, and disqualifying him for the observation, of the phenomena of moral liberty in man; and in the *second*, by habituating him to the exclusive contemplation of the phenomena of a mechanical necessity in nature. But an ignorance of the one order, and an extensive and intimate and constant consideration of the other, are tantamount to a negation of the unknown. For on the one hand, as we naturally believe to exist, that only which we know to exist; and on the other, as all science tends to unity, reason forbidding us to assume, without necessity, a plurality of causes; consequently the mathematician, if he think at all, is naturally and rationally disposed to hold, as absolutely universal, what is universal relatively to his own sphere of observation.

It is chiefly, if not solely, to explain the one phenomenon of *morality*,—of *freewill*, that we are warranted in assuming a second and hyperphysical substance, in an immaterial principle of thought; for it is only on the supposition of a moral liberty in man, that we can attempt to vindicate, as truths, a moral order, and, consequently, a moral governor, in the universe; and it is only on the hypothesis of a soul within us, that we can assert the reality of a God above us,—“*Nullus in microcosmo Spiritus, nullus in macrocosmo Deus.*”

In the hands of the materialist, or physical necessitarian, every argument for the existence of a deity is either annulled, or reversed into a demonstration of atheism. In his hands, with the moral worth of man, the inference to a moral ruler of a moral world is gone. In his hands, the argument from the adaptations of end and mean, everywhere apparent in existence, to the pri-

* Elements, iii. p. 272, seq.

mary causality of intelligence and liberty, if applied, establishes, in fact, the primary causality of necessity and matter. For as this argument is only an extension to the universe of the analogy observed in man: if in man, design,—intelligence, be only a phenomenon of matter, only a reflex of organization; this consecution of first and second in us, extended to the universal order of things, reverses the absolute priority of intelligence to matter, that is, subverts the fundamental condition of a deity. Thus it is, that our theology is necessarily founded on our psychology; that we must recognise a God from our own minds, before we can detect a God in the universe of nature.

Now, the mathematical sciences, on the one hand, by leaving wholly unexercised the capacity of philosophical reflection, prevent the mind from rising to a *clear consciousness of those fundamental facts on which its moral freedom is established*; and on the other, by accustoming it to the exclusive contemplation of the laws of physical necessity, indispose it to tolerate so extraordinary an assumption, so indemonstrable an anomaly, as a *moral order, an hyperphysical liberty, and an immaterial subject*.

This tendency of mathematical study has been always sufficiently notorious. Hence—(to take only the three contemporary fathers)—by *St Austin* mathematics are said “to lead away from God;” * by *St Jerome* to be “not sciences of piety;” * while *St Ambrose* declares, that “to cultivate astronomy and geometry is to abandon the cause of salvation, and to follow that of error.” †

We may here again refer to *Sir Kenelm Digby's* testimony, previously adduced (p. 284).

And *Poiret*, again, who, though a mystic in religion, was one of the profoundest thinkers of his age.

“The mathematical genus is wont, unless guarded against, to imbue the minds of its too intemperate votaries with the most pestilent dispositions. For it infects them with fatalism, spiritual insensibility, brutalism, disbelief, and an almost incurable presumption. For when, in the handling of their numbers, figures, and machines, they perceive all things to follow each other, as it were by fate, to the exclusion of liberty; they hence become so accustomed to the consideration of necessary connection alone, that they altogether eliminate freewill from the nature and government of things spiritual, and establish the universal supremacy of a fatal necessity.” ‡

* Vide Agrippam, De Van. Scient. c. xi.

† Officiorum, l. i. 26.

‡ De Eruditione Solida, p. 304. Ed. 1692.

So *Bayle* :—

"It cannot be disputed, that it is *rare to find much devotion in persons who have once acquired a taste for the study of the mathematics*, and who have made in these sciences an extraordinary progress." *

So *Gundling* :—

"He who too zealously devotes himself to the physical and mathematical sciences, may *lightly lapse into an atheist*. Hence we find, that all the more ancient philosophers were atheists, and this because too exclusively absorbed in physical and mathematical contemplations." †

Berkeley, himself no vulgar mathematician, asks :—

"Whether the corpuscularian, experimental, and mathematical philosophy, so much cultivated in the last age, hath not too much engrossed men's attention; some part whereof it might have usefully employed?—Whether from this, and other concurring causes, the minds of speculative men have not been borne downward, to the *debasing and stupifying of the higher faculties*? And whether we may not hence account for that prevailing narrowness and bigotry among many who pass for men of science, their *incapacity for things moral, intellectual, or theological*, their proneness to measure all truths by sense and experience of animal life?" ‡

Dr John Gregory, of a family to which mathematical genius seems almost native, and one of the most distinguished founders of the Edinburgh School of Medicine, in his "Lectures on the Duties and Qualifications of a Physician," after confessing that he distrusted his own judgment in relation to the study of mathematics, as afraid of his partiality to a science which he viewed with a kind of innate and hereditary attachment, and which had been at once the business and the pleasure of his early years, thus warns his pupils :—

"Let me also desire you to guard against its leading you to a disposition to *scepticism and suspense of judgment in subjects that do not admit of mathematical science*." §

Monboddo :—

"Those who have studied mathematics much, and no other science, are apt to grow so fond of them, as to believe that there is *no certainty in any other science*, nor any other axioms than those of Euclid." ¶

De Staël :—

"The mathematics lead us to *lay out of account all that is not proved*; while the primitive truths, those which sentiment and genius apprehend, are not susceptible of demonstration."

* Dict. Hist. voce Pascal, note G.

† Historie der Gelehrtheit, vol. i. Disc. Prelim. p. 8.

‡ Analyst, Qu. 56, 57.

§ Works, iii., p. 107.

¶ Ancient Metaphysics, i., p. 394.

** De l'Allemagne, i., c. 18.

This tendency in their too exclusive cultivation, to promote a disbelief in any other than an order of necessity and nature, is common to the *physical* and the *mathematical* sciences; hence, in reference to the former, the old adage—" *Tres Medici, duo Athei.*" It is, however, when the two studies are conjoined and carried out to the most extensive sphere of application, that this tendency is more powerfully and conspicuously manifested,—that is, in *Astronomy*.*

In the following sublime passage, *Kant*, with a different intention indeed, finely illustrates the opposite influences of material and mental studies, and this by the contrast of the two noblest objects of our contemplation:—

"Two things there are, which, the oftener and the more steadfastly we consider, fill the mind with an ever new, an ever rising admiration and reverence;—*the STARRY HEAVEN above, the MORAL LAW within.* Of neither am I compelled to seek out the reality, as veiled in darkness, or only to conjecture the possibility, as beyond the hemisphere of my knowledge. Both I contemplate lying clear before me, and connect both immediately with my consciousness of existence.—The one departs from the place I occupy in the outer world of sense; expands, beyond the bounds of imagination, this connection of my body with worlds rising beyond worlds, and systems blending into systems; and protends it also into the illimitable times of their periodical movement—to its commencement and perpetuity.—The other departs from my invisible self, from my personality; and represents me in a world, truly infinite indeed, but whose infinity can be tracked out only by the intellect, with which also my connection, unlike the fortuitous relation I stand in to all worlds of sense, I am compelled to recognise, as universal and necessary.—In the former, the first view of a countless multitude of worlds *annihilates*, as it were, *my importance as an animal product*, which, after a brief and that incomprehensible endowment with the powers of life, is compelled to refund its constituent matter to the planet—itsself an atom in the universe—on which it grew.—The other, on the contrary, *elevates my worth as an intelligence*, even without limit; and this through my personality, in which the moral law reveals a faculty of life independent of my animal nature, my, of the whole material world:—at least, if it be permitted to infer as much from the regulation of my being, which a conformity with that law exacts; pro-

* [It has been poetically said,—

"An undevout Astronomer is mad."

This however if poetical, is not true; or &c. For if, as has been quaintly but significantly expressed,—"*NATURE* is a Hebrew word written with mere consonants, to which *philosophy* must place the points;" certainly the "*Mechanism of the Heavens*" itself is not the grammar from which we can ever learn "to syllable the stars." Historically, a larger proportion of astronomers have been religious sceptics, in the last and worst degree, than any other class even of mere physical observers.]

posing, as it does, my moral worth for the absolute end of my activity, conceding no compromise of its imperative to a necessitation of nature, and spurning in its infinity the conditions and boundaries of my present transitory life."*

"Spirat enim majora animus seque altius effert
Sideribus, transitque vias et nubila fati,
Et momenta premit pedibus quaecunque pantantur
Figere propositam natali tempore sortem."†

As a pendant to Kant's, we shall adduce another testimony by a profound philosopher, in some respects, of an opposite school; by

* Cr. d. pr. V. Beschluss. This suggests *Prudentius*. [A similar contrast, but in different points of view, is signalled by other thinkers.]

An *ancient philosopher* has finely said:—"On earth, there is nothing great but Man; in man, there is nothing great but Mind. Whence if we ascend, we transcend the heavens; but, if descending to the body, we thence look upwards on the heavens, we seem to ourselves a fly, and something less than a fly."—For, in the eloquent language of an old philosophical physician —of *Sir Thomas Browne*:—"The earth is a point, not only in respect of the heavens above us, but of that heavenly and celestial part within us. This mass of flesh which circumscribes me, limits not my mind. That surface which tells the heavens they have an end, cannot persuade me I have any. . . . Surely, there is a piece of divinity in us; something that was before the elements, and owes no homage unto the sun. Nature tells me, as well as Scripture, that I am the image of God. He that understands not thus much, hath not his introduction or first lesson, and is yet to begin the alphabet of man."—And to conclude with a noble passage of *Pascal*:—"Man is only a reed, the very frailest in nature; but he is a reed that thinks. There needs not that all the universe should arm, to crush him. He dies of an exhalation,—from a drop of water. But should the universe so crush him, man would yet be nobler than that by which he falls, for he knows that he dies; and the advantage which the universe has over him,—thereof the universe knows nothing. Thus, our whole dignity consists in thought,—in consciousness. This therefore is that by which we ought to hold, and not by space or duration."‡

† *Prudent*. *Contra Sym.* ii. 479. [But did old *Chapman* take the hint from *Prudentius*, or draw inspiration from the same thought?

"I am a nobler substance than the stars.
And shall the baser overrule the better?
Or are they better since they are the bigger?
I have a will, and faculties of choice,
To do or not to do, and reason why
I do or do not this; the stars have none.
They know not why they shine, more than this taper,
Nor how they work, nor what. I'll change my course:
I'll piece-meal pull the frame of all my thoughts,
And where are all your Caput Algols then?"

[*Algol* = *Caput Medusæ*.]

him whom his countrymen have hailed the Plato of the latter age,
—*Frederic Henry Jacobi*.

"What, in opposition to Fate, constitutes the ruling principle of the universe into a true God, is termed *Providence*. Where there is no forecast there is no intelligence, and where intelligence is, there also is there providence. This alone is Mind; and to what only is of mind, respond the feelings that manifest its existence in ourselves,—Wonder, Veneration, Love. We can, indeed, pronounce an object to be beautiful or perfect, without a previous knowledge that it is the work of foresight or not: but the power by which it was produced, *that* we cannot admire, if, without thought, and without a purpose, it operated in obedience to the laws of a mere physical necessity. Even the glorious majesty of the heavens, the object of a kneeling adoration to an infant world, subdues no more the mind of him who comprehends the one mechanical law by which the planetary systems move, maintain their motion, and even originally form themselves. He no longer marvels at the object, infinite as it always is, but at the human intellect alone, which, in a Copernicus, Kepler, Gassendi, Newton, and Laplace, was able to transcend the object, by science to terminate the miracle, to reave the heaven of its divinities, and to disenchant the universe.*—But even this, the only admiration of which our intelligent faculties are now capable, would vanish, were a future Hartley, Darwin, Condillac or Bonnet, to succeed in displaying to us a mechanical system of the human mind, as comprehensive, intelligible, and satisfactory as the Newtonian mechanism of the heavens. Fallen from their elevation, Art, and Science, and Virtue, would no longer be to man the objects of a genuine and reflective adoration. The works and actions of the heroes of mankind,—the life of a Socrates and Epaminondas,—the science of a Plato and Leibnitz,—the poetical and plastic representations of a Homer, Sophocles, and Phidias,—these might still pleasurable move, might still rouse the mind to an enjoyment rising into transport; even so as the sensible aspect of the heavens might still possibly affect and gratify the disciple of a Newton or Laplace: but we must no longer ask about the principle of our emotion; for reflection would infallibly chide our puerile infatuation, and dash our enthusiasm by the suggestion—*That Wonder is only the daughter of Ignorance.*"†

* [*M. Comte*, a philosophical antipode of Jacobi, has recently and openly acknowledged:—"To those unfamiliar with a study of the celestial bodies, Astronomy has still the character of being a science pre-eminently religious; as if the famous text, '*The Heavens declare the glory of God,*' retained its old significance. But to minds familiar with true philosophical astronomy, the heavens declare no other glory than that of Hipparchus, of Kepler, of Newton,—in a word, of all those who have aided in establishing their laws."]

† Werke, ii. p. 54.—[The philosophy of the modern Plato is, in this respect, strictly correspondent with the philosophy of the ancient. "The doctrine," (to this effect speaks the Athenian), "which has propagated impiety among men, and occasioned all erroneous opinions concerning the nature of the Deity: is that, which reversing the real consecution of existence, affirms in regard to the generation of the universe, that to be posterior which is, in

We shall terminate our cloud of witnesses with the testimony of a celebrated metaphysician, a distinguished professor also of mathematics and physics in one of the principal universities of Germany. *Fries*, in his *Lectures on Astronomy*, thus speaks:—

"But it is rejoined:—You explain every thing by your omnipotent Gravitation;—what is the origin of that? I answer:—This, too, we know full well! The daughter of the old blind Fate; her servants Magnitude, Number, and Proportion; her inheritance a Universe without a God, which requires no God. . . . When the great astronomer Lalande denied a Deity,—could trace in the heavens no God, in the movement of the stars no finger of God; we are compelled to allow the logical consequence of his reasoning. That high order and adaptation of end and means is only the product of the rigid mechanism of brute and necessary laws; there, above, is only a blind mindless destiny, the absolute ruler of its universe. But I appeal to the truth of the saying in St John,—'*In the spirit only shall we worship God*;' and in what only our science is for mind, are its dignity and value to be found. He alone can style the order of the universe an adaptation of means to end, who *brings* to its observation a belief in the reality of design. But the true interpretation of the order of design, lies *far more clearly apparent in the mind of man*. The infinite spirit does not bail itself under proportion and number! The play with number is an easy play,—its joy, *only* the joy of the imprisoned spirit at the clank of its fetters."*

Are Mathematics then of no value as an instrument of mental culture? Nay, do they exercise only to distort the mind? To this we answer: That their study, if pursued in moderation and efficiently counteracted, may be beneficial in the correction of a certain vice, and in the formation of its corresponding virtue.

truth the cause; and that to be antecedent, which is no more than the effect. For, though mind and its operations are anterior to matter and its phenomena, and though nature and natural production are preceded and determined by intelligence and design; some, however, have preposterously sisted nature as the first or generative principle, and regarded mind, as merely the derivative of corporeal organism. (De Legibus, x.) The relative passage of Plato is, I see, quoted by the great Cudworth, (in Cambridge, "there were giants in those days,") in his *Immortal Morality* (B. iv. ch. 6, § 6. sq.)—But in connection with this matter, I may here mention a monstrous erratum (§ 14) which stands, both in the English edition of that posthumous work, procured by Chandler, Bishop of Durham, and, what is more remarkable, in the Latin version of the learned Mosheim; *contemplation* for *contemperation*.]

* Vorlesungen ueber die Sternkunde, pp. 16, 18, 227.

The vice is the habit of *mental distraction*; the virtue the habit of *continuous attention*. This is the single benefit, to which the study of mathematics can justly pretend, in the cultivation of the mind; and it is almost the one only, or at least the one principal, accorded to it by the most intelligent philosophers.—*Bacon*, who in his earlier writings admitted the utility of mathematics in sharpening the intellect; in his maturer works recommended a study of the school philosophy, as the best discipline of subtilty and discrimination.*—In like manner, the mathematical philosopher *Du Hamel* seems to accord no higher mental advantage to the mathematics; and at the same time observes, that “they have this of vice, that for the most part they *render us alien and abhorrent from the business of life*.”†—Of mathematical science *Warburton* holds, that besides affording us a knowledge of its peculiar method, “all its use, for the purpose in question, (the improvement of the powers of reasoning), seems to be only habituating the mind to *think long and closely*; and it would be well if this advantage made amends for some *inconveniences*, as inseparable from it.”‡—This, likewise, is all that is admitted of the

* In the first edition of his *Essays*, published in 1597, *Bacon* says, “*Mathematiks make men subtil*”; but having learned better in the interval, in the second, which appeared fifteen years thereafter, he withdrew this commendation, and substituted the following, which stands unaltered in all the after editions;—“If a man’s wit be wandering, let him study the *mathematiks*; for in demonstrations if his thought be called ever so little away he must begin again; if his wit be not apt to distinguish or find differences [*i. e.* be not subtle], let him study the schoolmen, for they are the *Cymini sectores*.”—By the by, a mistake as to the meaning of the adage.—(*Essay on Studies*.) [Here there is, I find, an oversight. Though at a different place of the same *Essay*, “*Mathematics*” are said to “*make men subtle*”; and this even in the last editions of the work.] In like manner, in *The Advancement of Learning*, published in 1605, he says of mathematics, “If the wit be too dull, they sharpen it; if too wandering, they fix it; if too inherent in the sense, they abstract it.” (*Book II. Mathematique*.) But in the relative place of the *De Augmentis Scientiarum*, the great work in which, after a mediation of eighteen years, the *Advancement* was corrected, remodelled, and greatly enlarged, he disallows the first and third of these utilities, and admits only the second. “*Si cupiam ingenium tale est quale est avium, ut facile abripiatur, nec per moram (qualem oportet) intentum esse sustineat; remedium huic rei præbebunt mathematica, in quibus si evagetur paulo mens, de integro renovanda est demonstratio*.” (*L. vi. c. 4.*)

† *De Mente Humana*, L. i. c. 8.

‡ *Julian*, Pref., p. xviii.

study by one of the most acute and cautious observers of the human mind and its modifications, and whose predilections, if we could suppose him biassed, were naturally all in favour of its importance,—we mean *Mr Dugald Stewart*. The son of a great geometer, himself a skilful mathematician, and formerly even a distinguished mathematical professor,—his writings naturally abound with allusions to that science; but we make bold to say, that there is not to be found in the whole compass of his works a single passage attributing another or a higher advantage to mathematical study, in relation to the mind, than that of “strengthening the power of steady and concatenated thinking.” Nay, when controverting *Mr Hume’s* contemptuous estimate of the utility and importance of mathematics, and when thus called upon to specify their various uses; he ascribes to them any value, not as affording a profitable exercise of mind, but exclusively, “as an organ of physical discovery, and as the foundation of some of the most necessary arts of civilized life.”* And, in the chapter of his *Philosophy of the Human Mind*, entitled, *The Mathematician*,—a chapter admirable alike for its depth and candour,—the improvement of the power of continuous attention is the only benefit which he admits; and that, likewise, to the express exclusion of the mechanical process of the algebraic analysis,—an exclusion in which he is supported by the highest practical authorities in education. “This *command of attention*, however, it may be proper to add, is to be acquired, *not by practice of the modern methods, but by the study of the Greek geometry*; more particularly, by accustoming ourselves to pursue long trains of demonstration, without availing ourselves of the aid of any sensible diagrams; the thoughts being directed solely to those ideal delineations which the powers of conception and of memory enable us to form.”†

[This observation of Stewart suggests the propriety of stating more articulately (if only by digression) the contrast of the two species of mathematics,—the *Geometric or Ostensive*, and the *Algebraic or Symbolical*. The former was invented, and exclusively cultivated, in antiquity; the latter, which owes its origin to the Arabians, has been principally perfected during the two last cen-

* Dissertation. &c. p. 171.

† Elements, vol. iii. p. 269.

turies. These species of mathematics differ in their methods; exert a different influence on their student; and merit cultivation, by different persons, and for different ends. The Geometric process is of a minor advantage in education; whereas the study of the Algebraic, if carried beyond a very limited extent, is positively disadvantageous. As instruments of science, however, and where the mathematician is considered, not as an end to himself, but as a mean towards an end out of himself, their comparative superiority is reversed. For, in the Geometric method, while the movement is more tedious, no step is possible without consciousness and a certain self-activity; whereas the Algebraic, though a more rapid process, works out its result by a mechanical operation, and with hardly any awakening of thought. The one thus affords, in some respects, an improving exercise to any; the other a convenient instrument, improving to none, and useful only to a few.

Specially against ALGEBRA, as a mental discipline.

We shall take the *mathematicians* as a *first class*; and here may be again referred to the testimonies, as already quoted, of *Gassendi* (p. 298), of *Berkeley* (p. 295), of *D'Alembert* (p. 295), &c.

The opinion of *Newton* himself upon this point is given by his friend and expositor, Dr *Pemberton*, whose words in the Preface to his "*Views of Sir Isaac Newton's Philosophy*" are as follows:—

"I have often heard him *censure the handling geometrical subjects by algebraic calculations*; and his book of Algebra he called by the name of Universal Arithmetic, in opposition to the injudicious title of Geometry, which Descartes had given to the treatise, wherein he shows how the geometer may assist his invention by such kind of computations. He frequently praised *Slusins*, *Barrow*, and *Huygens* for *not being influenced by the false taste which then began to prevail*. He used to commend the laudable attempt of *Hugo de Omerique* to restore the ancient analysis, and very much esteemed *Apollonius's* book *De Sectione Rationis*, for giving us a clearer notion of that analysis than we had before. Dr *Barrow* may be esteemed as having shown a compass of invention equal, if not superior to any of the moderns, our author only excepted; but Sir Isaac Newton has several times particularly recommended to me *Huygens's* style and manner. He thought him *the most elegant of any mathematical writer of modern times, and the most just imitator of the ancients*. Of their taste and form of demonstration Sir Isaac always professed himself a great admirer. I have heard him *even censure himself for not following them more closely than he did*, [yet he demonstrated every thing ostensibly]; and speak with regret of his mistake at the beginning of his mathematical studies, in applying himself to the works of Des-

cartes and other algebraic writers, before he had considered the Elements of Euclid with that attention which so excellent a writer deserves." *

Sir Isaac was conscious that if ever the handmaid should supplant the mistress,—if ever devotion to the algebraic method should supersede the cultivation of the geometric, then would mathematics sink from the rank of a liberal study into something little better than a handicraft dexterity. What would he have said, had he foreseen the present degeneracy of his own university!

Simson is worthy to stand next to Newton; and the following is from the life of that celebrated Mathematician, by a distinguished pupil, Dr John Robison, Professor of Natural Philosophy in the University of Edinburgh. (But I may mention parenthetically that the other great Scottish Mathematicians, *Maclaurin* and *Matthew Stewart*, were, even the former, decidedly averse from the application of the mechanical process of the Algebraic analysis.)

"Simson's original incitement to this study, as a treat, as something to please and refresh his mind in the midst of severer tasks, gave a particular turn to his mathematical studies, from which he never could afterwards deviate. Perspicuity and elegance are more attainable, and more discernible in pure geometry, than in any other parts of the science of measure. To this, therefore, he chiefly devoted himself. For the same reason, he preferred the ancient method of studying pure geometry, and even felt a dislike to the Cartesian method of substituting symbols for operations of the mind, and still more was he disgusted with the substitution of symbols for the very objects of discussion, for lines, surfaces, solids, and their affections. He was rather disposed in the solution of an algebraical problem, where quantity alone was considered, to substitute figure and its affections for the algebraical symbols, and to convert the algebraic formula into an analogous geometrical theorem. And he came at last to consider algebraic analysis as little better than a kind of *mechanical knack*, in which we proceed *without ideas of any kind*, and obtain a result without meaning, and *without being conscious of any process of reasoning*, and therefore without any conviction of its truth. And there is no denying, that if genuine unsophisticated taste alone is to be consulted, Dr Simson was in the right; for though it must also be acknowledged, that the reasoning in algebra is as strict as in the purest geometry of Euclid or Apollonius, the *expert analyst has little perception of it as he goes on, and his final equation is not felt as the result of ratiocination, any more than if he had obtained it by Pascal's arithmetical mill.*" †

Dr Robison, himself a distinguished mathematician, had, in like manner, a strong repugnance to the unintellectual procedure of

* View, &c., Pref. p. ii.

† Encyclopædia Britannica, v. Simson.

the Algebraic analysis; a repugnance stronger than we might even anticipate from his life of Simson.*

The last mathematical authority which I shall quote is that of *M. Chasles*, Member of the Institute, and Professor of the Higher Geometry in the Faculty of Sciences at Paris. *M. Chasles* is one of the most illustrious geometers now in Europe: and the following is translated from a discourse prefixed to his "*Traité de Géométrie Supérieure*," which appeared in 1852.

"We thus recognise what are the peculiar advantages of Algebra and of Geometry.—The former, by the marvellous mechanism of its transformations, passes rapidly from the point of departure to the end proposed; but frequently *in ignorance*, both of the road which it has travelled, and of the signification of the numerous formulæ which it has employed.—Geometry, on the contrary, which only draws its inspirations from the attentive consideration of things and the constentation of ideas, is naturally compelled to take note of the propositions which Algebra may neglect and ignore, constituting, as they do, the proximate connection between the two extreme terms. This procedure may sometimes appear difficult: but it is, in reality, the more simple, because the more direct; it is likewise the more luminous and the more fruitful."†

The *second* class of authorities presents the testimony of the great masters of the theory and practice of *education*:—and the first is that of the profoundest thinker whom Italy produced during the last century; one in fact, so far ahead of his own age, that it remained for ours to appreciate those great views in politics and history which the philosophers of his own country, France, and Germany, are now emulously engaged in expounding, vindicating, and applying. The following quotation is from an address, which *Vico* was in the habit of annually delivering to the academical youth, on the selection and conduct of their studies:—

"The practice of giving to young men the elements of the science of magnitude on the algebraic method, *chills all that is lively and vigorous in the youthful mind, clouds the imagination, debilitates the memory, dulls the ingenuity, and enervates the intellect*; which four are the things most necessary for the cultivation of the best pursuits of humanity; the first for painting, sculpture, architecture, music, poetry, and eloquence; the second for the learning of languages and of history; the third for invention; the fourth for wisdom. . . . And thus with the Algebraic calculus *the ingenuity is repressed*, because in this process we perceive not even what lies most immediately before us;—*the memory is stupified*, because the second sign being discovered, we no longer take thought about the first;—*the imagination is benighted*, because we image to ourselves absolutely nothing;—*the intellect is ruined*,

* Ibid. Snppl. v. Robison.

† *Géométrie Supérieure*, p. lxxxii.

because we substitute divination for reasoning;—in so much that those young men who have spent much time in this study have afterwards, to their utmost sorrow and repentance, found themselves *disqualified for the business of real life*. And therefore, in order to render it productive of any benefit, and unproductive of those evils which it might otherwise cause, Algebra ought to be studied for a short time at the close of the mathematical course. When, in order to find the required quantity, we should have to encounter great mental fatigue by using the Synthetic method, we ought then to have recourse to the Algebraic Analysis. But in so far as regards reasoning well by this sort of method, *it is better to acquire the habit by Metaphysical Analysis.*" *

The last testimony which I shall adduce, in regard to the opposite characters, and the different importance of the two species of Mathematics, in an educational point of view, is that of *Thiersch*, one of the most illustrious scholars of Europe, and not inferior to any authority in matters of education. The following quotation I rudely translate from his work on Learned Schools, in conformity to the views of which the national seminaries of Bavaria have been principally modelled and reformed. It is to be noticed that his observations, though relative to Gymnasias and Lyceæ,—an order of learned schools in Germany inferior to the Universities,—apply to a class of students in general greatly more advanced than those who matriculate in Cambridge.

"In order that Mathematical science should be more perfectly accommodated to the end which a Gymnasium proposes, and brought into so intimate a relation with the other branches of study that it may be viewed as their complement and equipoise, it is necessary to bring back its method to the procedure of the ancients,—of Euclid, of Archimedes, and of Apollonius of Perga.

"Though never abandoning the confines of the universal, Geometry reduces the laws and attributes of magnitude to perfect clearness,—by according to the senses a representation of those lines, surfaces, and solids which it conceives with the utmost completeness and precision; and thus issuing forth from behind the veil of mental invisibility into the visible and palpable, its doctrines may almost be seen and handled, and yet without losing aught of their purity and necessity. Thus Geometry, if I may so express myself, becomes a thinking with the eye, while Grammar through the ear holds intercourse with the inner mind. This relation of its laws to determinate figures, this apprehension of the highest and most surprising doctrines through the visibility of body, is precisely what at once attracts and animates the young,—what gradually elevates and prepares for high abstraction their powers as yet incapable of such an exercise. On this account *all employment of the Algebraic formulæ even for conic sections,*

* Opere Complete, l. p. 31.

ought to be discarded from the Geometry of the Gymnasium. Essential as these are to the Mathematician, in order to rise to the higher regions of his science, they are profitless and even hurtful in the course of discipline preparatory to its acquisition, and in the general cultivation of youth, inasmuch as they are only the repetition, in another form, of a procedure already familiar. He who five or six times transposes or transforms a given equation so as in the end to obtain a solution, teaching him, for example, that a projectile in its flight describes a parabolic curve;—to be conducted, I say, to this important result as by an invisible constraining force, rapidly and unerringly, indeed,—this will content him if an adept in Mathematics; but to the student it is profitless, inasmuch as the compulsory conclusion only exhibits to him in a new formula what he already knew by superfluous experience to be true. But something more than this is obtained by him who reaches the same truth by the Geometrical procedure of the ancients, in which Algebra was unknown, viz. by the constructive method of figures and the intuition founded on it. Whilst the Algebraic formulæ conduct us blindfold to the conclusion, the constructive method of Archimedes shows to us the whole machinery of the procedure laid open to the light, especially when the omission of the intermediate proposition is supplied by an intelligent teacher. Here every step is made with open eyes, with consciousness, and understanding; and, in the example adduced, from the harmonic connexion of figures, and from the consequences fully and lucidly evolved out of their properties, the result is finally obtained of the parabolic flight of projectiles. The same is the case with every other law, each being displayed to the view of the satisfied and admiring pupil, as a consequence clear and rigorous. Nothing can be better calculated than such a process to awaken the intellect to the clearest apprehension of the nature and cogency of strict probation; and thus to put it in possession of itself and its highest faculty,—that of deducing what is sought from what is given, what is invisible from what is seen, in order, like Archimedes, from a point beyond the earth to move the earth itself. What therefore is requisite, and even indispensable, is a complete and systematic manual of Geometry on the principles of Euclid, Archimedes, and Apollonius Pergæus, which, assuming their capital propositions, and connecting these with others, would afford a comprehensive view of constructive Geometry, in the spirit of antiquity, for the instruction, awakening, and improvement of youth." *

Nay, the present predominance in Cambridge of the Algebraic Mathematics, (a predominance perhaps partly owing to the reproach cast by Playfair, some forty years ago, on the ignorance prevalent in Cambridge of the Continental analysis, but which, assuredly, is no longer applicable, seeing that the second English University, the second Theological Seminary of the Anglican Church, is now a second-rate Ecole Polytechnique, †)—

* Ueber gelehrten Schulen, iv. Abth. p. 374, seq.

† Since writing this, I have met with the following testimony of M.

this is lamented, and its effect, as a slaughtering of intellect, reluctantly confessed, by the most intelligent friends of Cambridge herself. The two following extracts from the *Quarterly Review* may suffice to prove this; for that journal has always been the champion of the actual system of the English Universities, where this could with any shew of justice be defended.—The first is from an able article on Paley; and it is justly considered as a sign of his uncommon intellectual vigour, (and this even before Cambridge had again turned Anti-Newtonian and Algebraic,) that he was senior wrangler, yet his mind not apparently enfeebled by the exertion.

“The Cambridge system of study is a *forcing* system, which applying itself almost wholly to one subject, and being adapted to minds of a single cast, frequently *debilitates the understanding* through life, by the effort to produce a single fruitage.”*

What can be confessed,—what can be conceived, worse of a University?

The second extract is from an intelligent article on the Life of Bishop Watson.

“The period at which Watson appeared in the University of Cambridge may justly be regarded as the Augustan age of that University; the physics of Descartes had just before, [Watson entered the University in 1757, that is *seventy* years after the publication of the *Principia*,] given place to the sublime Geometry of Newton; the Metaphysics of human nature, as taught by Locke, had supplanted Aristotle; and the old scholastic Theology had been superseded in the schools by a set of rising and enlightened divines, under a learned and candid professor. It was certainly *to the advantage of the academical studies* that the *higher Algebra* was not yet invented, [?] and that the study of philosophy [*i. e.* mathematics and physics] in general was not

Guizot in regard to the Ecole Polytechnique itself; and there is no higher living authority than M. Guizot on the subject of education. It appeared in the “Assemblée Nationale,” 14th April 1852. The extract and its translation I take from the English newspapers.—“There has never been, in point of fact, a school which has spoiled so many good natural dispositions, or given a wrong bent to so many minds, as that of the Ecole Polytechnique. Those who have so much superadded, to studies and exaggerated tendencies, have forgotten the severe judgments pronounced by Descartes and Leibnitz themselves on mathematics when pushed to excess. It would seem, as if the Polytechnic School had been created expressly to illustrate the results of such excesses. France is the only country which possesses such a school, and yet it is not the only country that can boast of engineers and artillery officers of distinction; but it is the only one which possesses so many *perverted minds*, and so many *dangerous monomaniacs*, who reduce morals and politics to algebraical formulæ.”

* Vol. ix. p. 390.

hitherto pushed so far as either to engross or to *exhaust* the understanding of the academical youth. A due place was also allowed and required for classical pursuits, while the purest writers of antiquity were studied, not so much for the purpose of consummating the knowledge of points and metres, as of acquiring the noblest ideas of morals and politics in the clearest and most elegant language. Precisely at this period arose a constellation of young men eminently qualified, both by the force of their understandings and the elegance of their taste, to avail themselves of these advantages; and the names of Hurd and Powell, of Balguy and Ogden, are never heard by those who knew them or know their books, without the associated ideas of all that is clear in ratiocination, profound in research, and beautiful in language. As they disappeared from the scene, *abstract mathematics began to prevail in the university*; the equilibrium of study was destroyed; the liberal and manly system of education which had produced so many men of business and of the world, as well as of science, gradually disappeared; while the rewards which became necessary as stimuli to the higher acquirements of classical literature, tended to urge on the pursuits of difficult and recondite minutiae in criticism, as inapplicable, in one way, to any practical purpose of life, as the obscurities of Waring's *Miscellanea Analytica*, in another. The effects of this declension are but too visible at present in a hard, dry, 'exsiccous' style of writing, which has long since superseded, excepting in one or two solitary instances, the attic graces of the last generation.*

But returning from our digressive contrast of the ostensive and symbolical, of the geometric and algebraic, processes, in an educational point of view; and calling to mind, that the former had, exclusively of the latter, been proposed as a mean conducive to the *one sole intellectual virtue of continuous attention*: we proceed to consider, how far the study of *geometry* may pretend to be the appropriate discipline oven of this.]

But mathematics are not the only study which cultivates the attention; neither is the kind and degree of attention which they tend to induce, the kind and degree of attention which our other and higher speculations require and exorcise. In the study of mathematics we are accustomed, if we may so express ourselves, to a protensive, rather than to either an extensive, a comprehensive, or an intensive, application of thought. It does not compel us to hold up before the mind, and to retain the mind upon, a multitude of different objects; far less does it inure us to a steady consideration of the fugitive and evanescent abstractions and generalities of the reflective intellect. *Mr Kirwan* truly observes:—"As to Mathematics habituating the mind to intense application,

* Vol. xviii. p. 235.

there is no science that does not equally require it, and, in studying it, the habit is much more advantageously obtained."* And *Madame de Staël* admirably says:—"I shall be told, I know, that Mathematics render the attention peculiarly close (*appliquée*); but they do not habituate to collect, to appreciate, to concentrate; the attention they require is, so to speak, in a straight line; the human mind acts in mathematics as a spring tending in one uniform direction."†

We should remember also that the mind for whose peculiar malady a course of mathematics, as the appropriate specific, is prescribed, are precisely those which will not, in fact, cannot, submit to the prescription. "In vain" (observes *Du Hamel*) "do we promulgate rules for awakening attention, if the disposition be headlong, instable, presumptuous. Besides, all application of the mind is an act of will, and tho will cannot be compelled."‡ —After all, we are afraid that *Vives* and *D'Alembert* are right: *Mathematics may distort, but can never rectify the mind.*

But although of slender, and even ambiguous utility, as a gymnastic of the intellect, mathematics are not undeserving of attention, as supplying to the metaphysician and psychologist some interesting materials of speculation. The notions, and method, and progress of these sciences are curious, both in themselves, and in contrast to those of philosophy. Although, therefore, the inscription over *Plato's school* be but a comparatively recent fiction, we are willing to admit its truth,—nay, are decidedly of opinion, that mathematics ought to be cultivated, to a certain extent, by every one who would devote himself to the higher philosophy. But, on the other hand, we agree with *Socrates*, who "disapproved of the study of geometry," (and he says the same of astronomy,) "when carried the length of its more difficult diagrams. For, though himself not in conversant with these," (which he had studied under the celebrated geometer, *Theodorus of Cyrene*), "he did not perceive of what utility they could be, calculated as they were to consume the life of a man, and to turn him away from many other and important acquirements."§

We must now abruptly terminate. Our limits are already greatly exceeded. But we must still state, in a few words, what many sentences would be required to develop.

* Logick, I., preface, p. 6.

† De l'Allemagne, I., c. 18.

‡ De Mente Humana, l. i. c. 8.

§ Xenophontis Memorabilia, l. iv. c. 7, §§ 3, 5.

In extending so partial an encouragement to mathematical and physical pursuits, thus indirectly discouraging the other branches of liberal education, the University of Cambridge has exactly reversed every principle of academical policy.—What are the *grounds* on which one study ought to be *fostered* or *forced*, in such a seminary, in preference to others?

The *first* and principal condition of academical encouragement is, that the study tends to *cultivate a greater number of the nobler faculties in a higher degree*. That the study of mathematics effects any mental development, at best, in a most inadequate and precarious manner, while its too exclusive cultivation tends positively to incapacitate and to deform the mind,—this it has been the scope of the preceding argument to establish.

The *second* condition is, that the protected study *comprehends within its sphere of operation a larger proportion of the academic youth*. It can easily be shown that, in this respect, mathematics have less claim to encouragement than any other object of education. [They present no allurements for those not constrained to a degree; they qualify for none of the professions; and Cambridge stands alone in turning out her clergy, accomplished as actuaries or engineers, it may be, but unaccomplished as divines.]

The *third* is, that it is of *greater general utility for the conduct of the business, or for the enjoyment of the leisure, of after life*.—In regard to the *business*:—For men in general, no study is more utterly worthless than that of mathematics. In regard to the *leisure*; (for which as *Aristotle* properly observes, a liberal education ought equally to provide):—This study is of even less importance than for the business. No academical pursuit has, indeed, so few extra-academical votaries. The reasons are manifest. In the *first* place, mathematics, to be spontaneously loved, require a more peculiar constitution of mind and temperament than any other intellectual pursuit. In the *second*, as observed by *Plato*, no study forced in the school is ever voluntarily cultivated in life; (ὥς τε βίαιον οὐδὲν ἡμεῖς μάθημα). In the *third*, to use the words of *Seneca*:—"Some things, once known, stick fast; others, it is not enough to have learnt, our knowledge of them perishing when we cease to learn. *Such are mathematics*."*—The maxim, "*Non scholæ sed vitæ discendum*," is thus, in every relation, by the University of Cambridge, reversed.

* De Beneficiis, l. iii. c. 5. [See also Vives, above, p. 290.]

The *fourth* is, that, *independently of its own importance, it is the passport to other important branches of knowledge.* In this respect mathematical sciences (pure and applied) stand alone; to the other branches of knowledge they conduce,—to none directly, and if indirectly to any, the advantage they afford is small, contingent, and dispensable.

The *fifth* is, that, however important, absolutely and relatively, it is yet of such a nature, that, *without an external stimulus, it will not be so generally and so thoroughly cultivated as it deserves.* Mathematics, certainly, from the nature of their study, require such stimulus; the question is—Do they deserve it?

We cannot conclude, without strongly expressing our sincere respect for the venerable school of which, in this article, we have endeavoured to expose a modern abuse. With all its defects, there is even now, in the spirit of the place, what, were its mighty means all as well directed as some already are, would raise it in every faculty, in every department, to a place in the highest rank among the European universities. Some parts of the reform are difficult, and must be accomplished from without. Others are comparatively easy, and, it is not too much to hope, may be determined from within. Of these, the first and most manifest improvement would be the establishment of *three Tripodes of co-ordinate and independent honours*; of which *one* should comprise the different departments of philosophy proper, ancient and modern,—*another* the mathematical and physical sciences,—and a *third* the multifarious branches of classics, classical philology, history, &c. We cannot add a word in reference to the expediency and details of such a plan; but, in allusion to a philosophical Tripod, a noble testimony to the influence of metaphysical and moral studies in the improvement of the mind, rises to our recollection, which, as peculiarly appropriate to the occasion, we cannot refrain from adducing. It is by one of the acutest of thinkers,—the elder Scaliger.—“*Harum indagatio subtilitatum etsi non est utilis ad machinas farinarias conficiendas, exuit tamen animum inscitiae rubigine, acuitque ad alia. Eo denique splendore afficit, ut praeleceat sibi ad nanciscendum primi opificis similitudinem. Qui ut omnia plene ac perfecte est, at praeter, et supra omnia; ita eos qui scientiarum studiosi sunt, suos esse voluit, ipsorumque intellectum rerum dominum constituit.*”*

* De Subtilitate, Exerc. cccvii. 3. [When this was quoted, the fuller extract above (p. 40) was in abeyance.]

N O T E,
TOUCHING THE PRECEDING ARTICLE.

(APRIL, 1836.)

It is contrary to our practice to publish any answers or complaints, by authors dissatisfied with our criticisms; but we are induced to make an exception of Mr Whewell. He complains, that we have not fairly stated the purport of his recent publication on the Study of Mathematics. The nature of the charge, and the great respectability of the gentleman by whom it is made, render it impossible for us to be altogether silent; we, therefore, reprint his letter, (which has already appeared both in the Newspapers, and in the second edition of his Pamphlet*), with a few observations under the form of Notes, in vindication of ourselves.—[*Editor.*]

“ *To the Editor of the Edinburgh Review.*

“ CAMBRIDGE, Jan. 23d, 1836.

“ MY DEAR SIR,

“ I was gratified to find that a little pamphlet which I recently published, as “ Thoughts on the Study of Mathematics,” had excited so much notice as to give it a place at the head of an article in the *Edinburgh Review*;—and in regard to the manner in which the Reviewer has spoken of me, I have certainly no reason to be dissatisfied; nor am I at all disposed to complain

* [This Letter Mr Whewell republished also in the following year at the end of his book “ On the Principles of English University Education,”—but without the notes in reply.—For that book and for the Preface to his Mechanics, on both of which I shall be obliged to comment, I am indebted to the politeness of the author.]

of the way in which he has urged his own opinions. But I think the article is likely to give rise to a misapprehension which ought to be corrected; and for that purpose I trouble you with this letter.

"I wrote my pamphlet in order to enforce certain views respecting the conduct of our mathematical examinations at Cambridge. The question on which I threw out a few 'Thoughts' was, *what kind of mathematics is most beneficial as a part of a liberal education.* That this was the question to which I was trying to give some answer I stated in a passage (quoted by the Reviewer) at page 8 of the pamphlet. The previous *seven* pages, in which among other matter I had said a few words on the question, whether mathematics *in general*, or logic is the better mental discipline, were obviously only an introduction to the discussion of certain propositions, which, as the Reviewer observes, 'occupy the remainder of the pamphlet.' (1)

"It was therefore with no slight surprise that I looked at the magnificent manner in which the Reviewer has spoken of the small portion of these seven small pages which refers to the more general question. He calls it 'a treatise (a *Treatise!*) apparently on the very point' (2), (p. 265), 'a vindication of mathematical study' (3), (p. 266); and having thus made me work at a task of his own devising, he repeatedly expresses great disappointment that I have executed it so ill;—that 'so little is said on the general argument.' I should have thought that this circumstance might have helped him to perceive that it was not *my* general argument.

"I see nothing but the convenient and blameless practice of Reviews in making the title of my book the occasion of publishing an Essay on a subject only slightly connected with mine; but it appears to me that to attempt to gain a victory by representing a page or two of my 'Thoughts' as containing all that can be said by an able, earnest, official advocate on the other side, is not a reasonable treatment of the question. The writer proclaims that he means to give no quarter to my reasonings; but this proceeding looks rather like making an unexpected attack on a point when he thinks himself well prepared, on the arbitrary pretext that the truce has been broken by the adversary. (4)

"I should have no disinclination on a convenient occasion, to discuss the very important and interesting question which is the

subject of the Review. I cannot, however, look forward with confidence to the prospect of my being able to take it up for a considerable period; and shall probably leave the Reviewer in possession of his self-chosen field of battle for several months, it may be years. But if I should return to the subject, I should wish to know, as definitely as is possible, what are the questions at issue between us; (5) and I would therefore beg from the Reviewer information on the following points.

"The Works, which form our examples of Mathematical reasoning, are well known; I wish to know also what works of 'Practical Logic' on other subjects (p. 268) the Reviewer is willing to propose as rival instruments of education. (6)

"I wish to have some distinct account of the nature of that 'Philosophy' which is by the Reviewer put in contrast to Mathematical study (p. 279); and if possible to have some work or works pointed out, in which this Philosophy is supposed to be presented in such a way as to make it fit to be a cardinal point of education.

"I may remark also, that all the Reviewer's arguments, and, I believe, the judgments of all his 'cloud of witnesses,' are founded upon the nature and processes of pure mathematics only;—on a consideration of the study of the mere properties of space and number. My suggestion of the means of increasing the utility of mathematical studies was directed mainly to this point;—that we should avoid confining ourselves to pure mathematics;—that we should resort to departments in which we have to deal with other grounds of necessary truth, as well as the intuitions of space and time: so far, therefore, the Reviewer and I have a common aim, and I notice this with the more pleasure, since we have so far a better prospect of understanding each other in any future discussion. (7)

"I will not now trespass further on your patience. In order to remind my Cambridge readers of the state of the question, I shall probably place before them something to the same effect as what I have now written.

"Believe me, my dear Sir,

"Yours very faithfully,

"W. WHEWELL."

NOTES ON THE PRECEDING LETTER.

(1) We of course willingly admit whatever Mr Whewell says was *his intention* in writing his pamphlet; but we must be allowed to maintain that, *as written*, our view of its purport (in recommendation and defence of mathematics in general, as a mean of liberal education,) is the view which every reader, looking either at the title of the treatise, or at the distribution and conduct of its argument, must necessarily adopt. The title is—"Thoughts on the Study of Mathematics, as a part of a Liberal Education." The pamphlet opens with a statement of the two counter opinions in regard to the study of mathematics, as a mental discipline;—the one holding it to be highly beneficial, the other, highly detrimental. Mr Whewell then proceeds:—"Any view of this subject which would show us how far and under what circumstances *each* of these opinions is true, would probably help us to see how we must regulate our studies so as to make them most beneficial," &c. "It is in this belief that the few reflections which follow have been written." The plan of the work being thus laid down, the author goes on to accomplish the *first part* of his undertaking, by endeavouring to show, that the *former opinion* is absolutely true; inasmuch as the study of mathematics is conducive, even more than logic, to the cultivation of the reasoning faculty. This being done, he passes to the *second part*, and endeavours to show, that the *latter opinion* is conditionally true, inasmuch as certain modes of teaching the science, to which Mr Whewell is opposed, are given up as worthy of all condemnation. These two parts are, *ex facie libri*, co-ordinate; nay, so far is the first part, though occupying a smaller portion of the pamphlet, from being "obviously only an introduction" to the second, that, whatever were the *intentions* of the writer, if the two be not allowed to be co-ordinate, the reader must, from the tenor of the writing, hold the second to be correlative to the first. For it is only *on the ground* of the first part,—only *on the supposition* of the general argument being conclusive, that the second part, or special argument, is allowed by the pamphlet subordinately to emerge. The following are the words of transition from the one head to the other:—"Supposing, then, that we wish to consider mathematics as an element of education, and as a means of forming logical habits better than logic itself, it becomes an important question,

how far this study, *thus recommended*, is justly chargeable with evil consequences, such as have been already mentioned." Then follows the rest of the passage (p. 269) referred to by Mr Whewell and quoted in the Review; where, however, there is not to be found a single word of a different tendency.

(2) We must be allowed to observe, that we *did not*. That expression was used by us in speaking of the *whole work*, and in speaking of it as yet known, *only from the advertisement of its title*. And what is Mr Whewell's notion of a *treatise*?

(3) If the first division of the pamphlet be not a "vindication of mathematical study as a principal mean in the cultivation of the reasoning faculty," (for that is our *full* expression), what is it? We said that it was *too short*; and that it *took notice of none of the objections* to the study in general, as disqualifying the mind for observation and common reasoning. We cannot, therefore, justly be accused of allowing it to be supposed, far less of holding it out, to be other than what it actually is. How then can Mr Whewell assert, as he afterwards does, that we "attempted to gain a victory by representing a *page or two* of his 'Thoughts' as containing *all that can be said by an able, earnest, official advocate*?" But though the general argument was, as we stated, brief and only confirmatory, were we not warranted, on that very ground, in supposing that Mr Whewell regarded it as of itself sufficiently strong,—as of itself *decisive*? Because it is shown to be illogical, it does not cease to exist.

(4) The expression quoted was, *in its connexion*, manifestly only one of personal civility to Mr Whewell. Of all meanings, assuredly the one here put upon it is about the last which it could reasonably bear.—We were too conscious of the unavoidable haste in which the article and its authorities were thrown together, with sole reference to Mr Whewell's treatise, to dream of pluming ourselves on our preparation for attack. On this ground we must even found an excuse for one error at least, incurred in our too absolute assertion touching Bacon, in the text [now corrected] and relative note at p. 314.—As to "truce,"—"pretext,"—"adversary," we comprehend nothing.

(5) The one general thesis which we maintained was:—That the study of the mathematical sciences is, for reasons assigned, undeserving of *special* encouragement, *as a mean of mental cultivation*; and, therefore, that the University of Cambridge, in so far as its system of education bestows not only a *special*, but a

paramount, not to say an exclusive, encouragement on these sciences, violates every principle of academical policy.*

* [Dr Whewell on this says :—"The charge, that the University of Cambridge bestows not only a special but a paramount and exclusive encouragement on these (the mathematical) sciences is not only unfounded, but is inexcusably so, because it is impossible to refer to any record of the prizes which the University bestows, without seeing that there is a much greater number offered and given in other subjects than in Mathematics." (*Mechanics*, fifth edition, Preface, p. viii.)

What I stated (though Dr Whewell is pleased to call it "not only unfounded, but inexcusably so,") is literally correct.

But Dr Whewell, in the *first* place, misrepresents my words. I did not say, "that the University of Cambridge bestows an *exclusive* encouragement on the mathematical sciences;" and what I did say, "that the University of Cambridge bestows not only a special but a paramount, not to say an exclusive, encouragement on these sciences,"—this is rigidly true.

But in the *second* place, Dr Whewell himself asserts what, to use his own words, "is not only unfounded, but inexcusably so," inasmuch as he makes "the prizes which the University bestows," and their "*number*," the measure of academical encouragement. This is wholly fallacious; and for these reasons :—1°. The prizes, afford they what encouragement they may, are not founded, cannot be withheld, and therefore are not, in propriety, bestowed, by the University, that is by its dominant body, at all. They are the accidental bequests of individuals, in favour of certain favourite pursuits, (it may be) of certain personal crotchets. 2°. Their number is insignificant, and a large minority given to, or not without, mathematical eminence. 3°. Their pecuniary value is small, and, in this respect, the highest are the mathematical. 4°. The competition is principally for those mathematical, as to them the highest honour and the surest advantages are attached. 5°. But to these inadequate marks of distinction, which the University really does not bestow, and for which, be it for good or ill, it is, in fact, not responsible, Dr Whewell would not only himself limit, but would compel me to limit, the encouragement which Cambridge extends to the several branches of education. Marvellous to say! he wholly overpasses the one encouragement, in comparison to which all others fade out of view; I mean the *Tripes*, that is, as he himself defines it, "the list of the names of those to whom the University assigns honourable distinction after a public trial," and this in the order of merit.

It will not be denied that this is the standard, according to which in Cambridge (and be it spoken to the credit of the place,) appointments in University and College are usually determined. The *Tripes*, and not the Prizes, is therefore the measure by which principally if not exclusively is to be gaged the amount of encouragement,—the quantum of honour and advantage bestowed in Cambridge on the several academical studies. This being premised, the following facts cannot be denied.—1°. That for near a century, to go no higher, (from 1739 to 1824) there was no *Tripes* list, that is, no public honour, except for *mathematical* distinction.—2°. That during that time, and down to 1830, (when "the Previous Examination" with its sorry minimum

(6) We objected not to the works in which mathematics are studied in Cambridge; but to the disproportioned encouragement which that university accords to the study of mathematics altogether; and we argued for the restoration of philosophy proper, to its old and legitimate pre-eminence, and not for the introduction of any *particular books* in which that philosophy may be best presented. This may form the subject of ulterior discussion. But we shall certainly not perplex the *present* question, by a compliance with Mr Whewell's misplaced request.*

began,) no qualification whatsoever, beside a certain *mathematical* competence, was requisite for a degree; the University of Cambridge according its certificate of proficiency in the seven liberal arts to every illiterate barbarian who went up even for the lowest of its three classes of mathematical honours: and as such degree was a passport into holy orders, this "Venerable School" was allowed, for generations, to deluge the Church of England with a clergy void even of one ascertained qualification for their sacred calling. So far, though all our British Universities are in various respects absurd, the University of Cambridge, in this absurdity, may rank supreme.—3°. That when, in 1824, the Classical Tripos commenced, though no classical proficiency was required from the competitor for mathematical honours, a *mathematical* honour was required as a preliminary from all who would compete for classical distinction. Thus, encouragement to classical study was only allowed as an additional stimulus to mathematical; and accordingly, if I had asserted, as I did not, that the University of Cambridge bestowed an *exclusive* encouragement on the latter study, I should not perhaps have asserted more than what any one was warranted to do. (Of the recent changes in the academical system of Cambridge it would be here out of place to say anything. But see Appendix, III. (C).)—Whether then, is Dr Whewell's statement or mine,—“not only unfounded, but inexcusably so”?)

* [Referring to this paragraph, Dr Whewell (in his book on the Principles of English University Education, p. 2) says:—“There is another controversy, to which some part of the following pages may appear to have reference:—the question of the comparative value of *Mathematics*, and of certain other studies which have been termed *Philosophy*, as instruments of education. An Edinburgh Reviewer, in a criticism upon a former publication of mine, maintained that the study of mathematics is, for such a purpose, useless or prejudicial; and recommended the cultivation of ‘philosophy’ in its place. In a letter to the Editor of the Review, (which I published,) I expressed my willingness to discuss the subject at a future time; and, referring to the mathematical course of this University, as my example of mathematical education, I requested to be informed, by description, or by reference to books, what that ‘philosophy’ was, which the Reviewer was prepared to contend for, as a better kind of education. I considered this as a proceeding, in the courtesy of literary combat, equivalent to sending my opponent the measure of my weapon, and begging to be furnished with the dimensions of his. When, therefore, the reviewer, in reply, flatly refused ‘to perplex the ques-

(7) Our objections and those of the authorities which we adduced, are directed against [the excessive study of] the mathe-

tion by a compliance with Mr Whewell's misplaced request,' I certainly considered myself as freed from any call to continue the controversy. No adherent of the reviewer could expect me to refute a proposition which the author himself did not venture to enunciate in an intelligible form. And, therefore, in the present book, I do not at all profess to discuss the question of the value of mathematics, and other kinds of philosophy, with reference to the reviewer's assertion, but simply so far as it is brought before me by the general course of my reflections."

On this I must be permitted to observe, that Dr Whewell represents me as saying what, in fact, is a reversal of my real expression. For I did not "*flatly refuse*" to state what I thought were the particular books in which philosophy might be most profitably studied, I merely adjourned it to its proper season. "This," I said, "may form the subject of *ulterior* discussion." I did not, as Dr Whewell quotes me, "refuse 'to perplex the question,'" &c., but "to perplex the *present* question," &c. Such are my words.

In this proceeding I was fully persuaded of its propriety. The question on which I had engaged was, *the utility of mathematical study, in general, in any form, in any books, as a liberal exercise of mind*: and this question behoved to be disposed of, before entering on another,—and another which could only emerge, and that too subordinately, after the primary and principal problem had been decided;—this in fact would be a *new* question. On the problem in hand, I was firmly convinced that Dr Whewell could allege nothing solid in favour of mathematical study, to the extent in which it is fostered or forced in Cambridge; for to that effect, I knew that nothing solid ever had been, or, I believed, ever could be, alleged. Was I therefore to descend from this impregnable position, where I stood secure, and of which I was persuaded, (nor has the event belied the anticipation,) that Dr Whewell was too prudent to attempt the assault?—Counter arguments, worthy of consideration, there are none; and as to authorities of any cogency, there is only the authority of the University of Cambridge itself. And of what value is that? It is not, in fact, the University of Cambridge, in propriety, which can be alleged as such authority; that is, the *University organised by statute*. It is only a private and intrusive interest which has there superseded the public seminary, and this has calculated for the advantage of its members, and not for the national good, the education which Cambridge has long been permitted to dispense. This private interest is that of the Colleges and of their Tutors; and in Cambridge there has for generations been taught, not what the ends of education, not what the ends of science, prescribe, but only *what*, and that what *how*, the College Tutors are capable of teaching. It would be here out of place (and is indeed done elsewhere) to explain the manner in which a mere Collegio-Tutorial instruction must be scanty and mechanical, and why the mechanism once made up, remains, and must remain, long after the opinions which it chances to comprehend and teach are elsewhere exploded. Suffice it for an example, to take the remarkable, the notorious fact: that fifty, that sixty years after Newton

matical sciences in general. Mathematics can be applied to objects of experience only in so far as these are *measurable*; that is, in

had published his *Principia*, the physical hypothesis of Descartes were still tutorially inculcated in Newton's own University.* In fact, I believe, that the Cambridge Colleges were about the *last* seminaries throughout Europe in which the Newtonian doctrine superseded the Cartesian, and this too in opposition to the Professorial authority of Newton himself, and of his successors in the Public Chair. And why? Simply, because in these colleges, instruction was dispensed by tutors, for their own convenience and advantage; and these tutors, educated in the old routine, were unable or unwilling to re-educate themselves for teachers of the new truth. This is an example of the value of Collegial, of Tutorial, *authority* in Cambridge; and we may be sure, that whatever are the subjects comprised in the tutorial mechanism of the time, will be clamorously asserted by the collegial interest to be the best possible subjects of academical education; while all beyond it, all especially that cannot be reduced to a catechetical routine, will be as clamorously decried. Even the noble and invigorating study of ancient literature may be reduced to a comparatively barren and unimproving exercise of the lower faculties alone. But on this matter I am happy to agree with Dr Whewell; and nothing certainly can be more deserved than his censure of the Cambridge tutorial methods of classical reading and examination.

But the notion of Dr Whewell, that because the Cambridge text-books on Mathematics are "well known," (though, if I knew, I never once referred to any,) therefore, that I was bound, and *hoc statu*, to specify the book or books on Philosophy which I would recommend in their room;—this notion is not merely preposterous. For—

1°. In mathematics there is no difference of opinion about mathematical truth; all mathematical books are all true; and the only difference of better and worse, between one mathematical book and another is, that this presents the common truths under an easier form than that, exacting, therefore, from the student a less amount of intellectual effort. The *best* mathematical treatise thus constitutes, *pro tanto*, in itself, the *worst* instrument of education. For—

2°. The highest end of education is not to dictate truths, but to stimulate exertion; since the mind is not invigorated, developed, in a word, *educated*, by the mere possession of truths, but by the energy determined in their quest and contemplation. But—

3°. This is better done by *any* work on philosophy which stimulates to strong and independent (be it even for the time erroneous) speculation, than by the *best* work in mathematics which delivers truth but does not exelte thought. Mathematical contrasted with philosophical truths, are, indeed, comparatively ninteresting, comparatively worthless; but they are more certain. I admit, indeed, now, as I have done before:—"Mathematics, from the first, have been triumphant over the husk; Philosophy is still militant for the kernel." But what is this to the question—*Which study best cultivates the mind?*

* I see, that Dr Whewell has stated the reverse of this.

so far as they come, or are supposed to come, under the categories of extension and number. Applied mathematics are, therefore, equally limited and equally unimproving as pure. The sciences, indeed, with which mathematics are thus associated, may afford a more profitable exercise of mind; but this is only in so far as they supply the matter of observation, and of probable reasoning, and therefore, *before* this matter is hypothetically subjected to mathematical demonstration or calculus. Were there in the physical sciences, as Mr Whewell supposes, other grounds of necessary truth than the intuitions of Space and Time, the demonstrations deduced from these would be equally monotonous, equally easy, and equally unimproving, as the mathematical. But, that Mr Whewell confounds empirical with pure knowledge, is shown by the very example which he adduces at p. 33 of his pamphlet. The solution of that requires nothing but experience and the logical analysis of thought.*

* [Referring to this paragraph, Dr Whewell (Preface to the fifth edition of his *Mechanics*, p. vi.) says:—"Some persons appear to doubt whether there are, in the physical sciences, other grounds of necessary truth than the intuitions of space and time. We might demand of such persons whether the properties of the pressures which balance each other on the lever, as proved by Archimedes, be not necessary truths? whether our conceptions of pressures, and the properties of pressures, are modifications of our conceptions of space and time? and if they are not, whether necessary truths concerning pressures must not have some other ground than the Axioms of Geometry and Number? We might ask them whether we do not, in fact, in works like this, show that there are such other grounds, by actually enunciating them? whether the Axiom, that the pressure on the fulcrum is equal to the sum of the weights, be not self-evident, and therefore necessary?"

"If it be said, that the establishment of such propositions as this 'requires nothing but experience and the logical analysis of thought,' we cannot help replying, that such a remark seems to betray confusion of thought and ignorance of the subject. For it would appear as if the author denied the character of necessary truth to such principles because they depend *only* on experience and analysis; and that if, besides these, they depended upon some additional grounds, he would allow them to be necessary. Again, it is clear that, in fact, such propositions do not depend at all upon experience; for, as has elsewhere been urged,—'Who supposes that Archimedes thought it necessary to verify this result by actual trial? Or if he had done so, by what more evident principle could he have tested the equality of the weights?' (*Thoughts on the Study of Mathematics, &c.* p. 33.) And if such propositions depend upon logical analysis only, how can they be otherwise than necessary? Does the objector hold that truths which resolve themselves into logical analysis, are empirical truths?"

"I conceive, therefore, that the cultivation of such a subject as this may

be of great use both to the Students of this University and to other persons, not only in familiarizing them with the character of necessary truths, and the processes of reasoning by which such a system of truths is built up; but also by showing that such truths are not confined to the domain of space and number merely."

Here the tables are completely turned.—I had objected to mathematical study,—that, if too exclusively pursued, it tended to induce a habit of confused thinking; but "confusion of thought and ignorance of the subject" are here objected to the objector. This stroke is bold, but dangerous. If not successful, it is suicidal; for it challenges retort, and should the missile from Dr Whewell fall harmless, it may be returned with even fatal effect.

Dr Whewell, by position, is the first man in the first college, as by reputation, he is the ablest functionary, of Cambridge. In that mathematical university he stands the foremost mathematician; but there, he likewise rises pre-eminent, out of mathematics, as a philosopher. Cambridge and mathematics could not, therefore, be more favourably represented. In these circumstances, if Dr Whewell, accusing others, be himself, and from the very terms of his accusation, proved guilty of his own charge; how virulent, how permanently deleterious, must be the effect of mathematical study, when a naturally vigorous intellect could not resist, when other and invigorating studies could not counteract, the mathematically induced alacrity to confusion of thought, even during the brief act of preferring that very reproach itself, and with reference likewise to a favourite science? But so it is. For to establish the fact, it is unnecessary to look beyond the previous extract; which, both in the ground of charge itself, and in the statements by which that charge is accompanied, supplies abundant evidence of confused and inadequate thinking.

Dr Whewell here, as in his "Thoughts on the Study of Mathematics," repeatedly propounds it, as "a self-evident, and therefore necessary" proposition,—as an "Axiom;" that "the pressure on the fulcrum is equal to the sum of the weights." But to common sense and unconfused consciousness, this proposition is nothing of the kind: it is not self-evident; it is not necessary; it is not an axiom; for it is *not true*. The pressure on the fulcrum is equal to the sum of the weights, *plus the weight of the lever*; in other words, it is equal to the weight of the system. Of course, no one knows this better than Dr Whewell; but having ideally and for himself abstracted from the weight of the lever, he inadvertently advances for others, in his popular pamphlet, without warning or explanation, a statement which, to popular apprehension, is manifestly false.—There are other parts of this extract which I for one do not pretend to understand, without, at least, supplying what the author has omitted; but let that pass.

Having so indistinctly expressed himself, I cannot wonder that Dr Whewell has so completely misconceived me;—supposing, as he does, that I could possibly hold propositions to be empirical, to be not necessary, in so far as these are applications of the canons of Logic. What I said, and clearly said, was this:—that the proposition in question (waving all inadequacy of expression) is no *axiom*, is no *principle*, because a derivative judgment, derived too from a double source; 1°, derived from the exercise of experience; 2°, derived from the laws of thought. This was said, in saying, that

Dr Whewell's pretended axiom "requires nothing for its solution but experience and the logical analysis of thought."—And that it is derived, and derived from these two sources, I now proceed to establish.

1^o, *It is derived from experience.*—Dr Whewell asserts, "that such propositions do not depend at all upon experience."—On the contrary, I maintain, that all propositions which involve the notion of *gravitation, weight, pressure*, presuppose experience; for by experience alone do we become aware, that there is such a *quale* and *quantum* in the universe. To think it existent, there is no necessity of thought; for we can easily in thought conceive the particles of matter, (whatever these may be,) indifferent to each other, nay, endowed with a mutually repulsive, instead of a mutually attractive force. We can even, in thought, annihilate matter itself. So far the asserted axiom is merely a derived, and that too merely an empirical, proposition.—But, moreover, not only are we dependent on experience, for the fact of the *existence* of gravitation, &c., we are also indebted to observation for the further facts of the *uniform* and *continuous* operation of that force; and thus, in a second (and even *third*) potency, are all such propositions dependent upon experience.—In sum: We cannot *think* this and such like propositions, without founding doubly (or rather, *trebly*) upon *experience*.—Dr Whewell indeed observes, in addition to what has been extracted:—"If it be said, that we cannot possess the ideas of pressure and mechanical action without the use of our senses, and that this is experience; it is sufficient to reply, that the same may be said of the ideas of relations in space; and that thus Geometry depends upon experience in this sense, no less than Mechanics." (Ib. p. viii.)—This is, however, only another instance, in him, of the "confusion of thought and ignorance of the subject," which he imputes to me. "The ideas of relations in space," and "the ideas of pressure," &c. differ obtrusively in this:—that we can in thought easily annul pressure, all the properties of matter, and even matter itself; but are wholly unable to think away from *space and its relations*. The latter are *conditions* of, the former are *educts* from, experience; and it is this difference of their object-matters which constitutes—Geometry and Arithmetic *pure* or *a priori* sciences, and Mechanics a science *empirical* or *a posteriori*.

((1853))—Dr Whewell would seem not to have attended to the distinction previously alluded to (p. 335), of Pure and Applied Mathematics. In the latter, the *necessary form*,—that which we cannot but think, is applied to some *contingent matter*,—to an object of whose existence, and of the condition of whose existence, we are informed solely by *experience*, and which we therefore apprehend merely as an actuality or fact.

Thus, to take what is called the Mathematic of Probabilities; here an hypothesis, which if not imagined rests on observation, is submitted to the calculus; for mathematics to measure what, *on this hypothesis*, is the necessary amount of probability—the certain quantum of chance, in a given case, or in a given number of cases. In this process the result is mathematically certain; but it is really certain, only on the truth of the hypothesis given, whether that hypothesis be imaginary, or whether it be established on observation. If that hypothesis be true, the mathematical result will be also true; if that hypothesis be false, the mathematical result will be false likewise. The application of mathematics does not change the character of right or

wrong originally belonging to the hypothesis ; it does not even enable us to determine which it is.—Again, what are called Physical Laws—Laws of Nature—are all generalisations from observation, are only empirical or (if we may be allowed the word) experiential informations. As empirical, they are not thought as necessary : at least not in the strict and proper sense of the expression ; they are not necessary to us—to our thought, for we are able to conceive them not to be. These experiential facts—these laws—are now, *after* being apprehended by observation so to be, thrown into the Mathematical mill ; and, *on the hypothesis* merely of their (empirical) truth, do we, by the applied calculus or demonstration, explicitly evolve what they are thus *supposed* implicitly to contain. Weight, for instance, is an attribute of bodies only learned by experience ; and, of course, its laws are all, likewise, merely empirical. On this I may refer to Kant, in his “ Critic of Pure Reason ;” (Eiul. § iv. p. 11. ed. 3). In that work, the philosopher speaks psychologically, and is rigidly correct : but in his “ Metaphysical principles of Physics,” speaking dynamically, that is hypothetically, he apparently contradicts himself ; and I can thus easily understand, how Kant may have led Dr Whewell and others astray. For in that work, among other positions, which I should be sorry to defend, he ostensibly declares, as *à priori* or necessary qualities of matter : 1°, the Repulsive or Expansive force, i. e. an original *elasticity* of body ; (something more therefore, than a *passive* Insuperable resistance to ultimate compression or diminution out of space, and which, yet which only, we cannot but attribute to what, like matter, is not to be thought, unless as extended ;) and, 2°, the general Attractive force, Gravitation or Weight. I have elsewhere (Diss. on Reid, pp. 845—875) endeavoured, *rigorously* to evolve the Primary or necessary qualities of matter from the necessary conditions of thought ; the properties, however, now specified, fall only into the class of, what I there call, the Secundo-primary qualities, as merely contingent and a posteriori attributes of body.—Dr Whewell’s opinions upon this and other kindred points, are redargued with great acuteness by the Rev. Mr Mansel of St John’s College, Oxford, in his late valuable work—“ Prolegomena Logica,” (Note A and pp. 77, sq.)—Mr Mansel has also subsequently, in answer to an able letter of Dr Whewell, more fully discussed the question, and placed the matter on its proper footing, in a most satisfactory pamphlet,—“ The limits of Demonstrative Science considered.”—See also Mr Stewart’s Elements, (iii. pp. 283—290.)]

I now proceed to the second head of reduction.

2°, *It is derived from the logical analysis of thought.*—Under this head my objection to Dr Whewell’s “ Axiom ” is, that it is merely a predication of a thing of itself, a mistaken commutation of the *analytical* principle of *identity* in *logic* with a *synthetical* principle of some *non-identity* in *mechanics*. This pretended axiom is, in fact, nothing more than the tautological judgment, “ that the whole is equal to all its parts ;” the confusion being occasioned and veiled by different words being employed to denote the same thing. These different words are *weight* and *pressure*. But weight and pressure are (here) only various terms for the same force. What weighs, *pro tanto*, is supposed to press ; what presses, *pro tanto*, is supposed to weigh. The *pressure* on the fulcrum—is thus only another phrase for—the *weight* on the fulcrum ; and to say, with Dr Whewell, that “ the pressure on the fulcrum is

equal to the sum of the weights," this (waving always the inaccuracy) is only tantamount to saying,—either, that the pressure on the fulcrum is equal to the sum of the pressures on the lever,—or, that the weight on the fulcrum is equal to the sum of the weights on the lever. It consequently requires, as I said, only a logical analysis of the enunciation that "the whole is equal to all its parts, therefore, to its two halves," &c., to obtain the idle proposition which Dr Whewell has dignified by the name of—"Axiom in Mechanics."

Dr Whewell's error from "confusion of thought," in this instance, is akin to a mistake which I have elsewhere found it necessary to expound, (*Dissertations on Reid*, p. 853);—I mean his attempted "Demonstration," (from a supposed law of thought,) "that all matter is heavy."

Bnt,—I had almost forgotten,—what shall we say of Archimedes? "The Axiom" is apparently fathered upon him; he was a great mathematical inventor; and it is maintained above (p. 290, sq.) that mathematical invention and philosophical genius (in which are necessarily comprehended distinct and perspicuous thinking) coincide. I was certain, before re-examining the treatise on *Equiponderants* by Archimedes, that it could contain no such principle, no such truism; nor does it.

The reader is now in a condition to decide:—Whether the charge of "confusion of thought and ignorance of the subject" weigh on the accuser or on the accused; and, in general, Whether "*Mathematics be a means of forming logical habits better than Logic itself.*"

But before concluding, I am tempted to give one—in fact two other specimens of "the confusion of thought" in Dr Whewell's reasoning, and of the manner in which ("telumque imbellis sine ictu,") his "Mathematical Logic" is brought to bear against my arguments.

The *first*:—"I shall not pursue," he says, "the consideration of the beneficial intellectual influence of Mathematical studies. It would be easy to point out circumstances, which show that this influence has really operated;—for instance, the extraordinary number of persons, who, after giving more than common attention to mathematical studies at the University, have afterwards become eminent as *English Lawyers.*" (*English University Education*, p. 14.)—The fact of the consecution I do not doubt. But if Dr Whewell had studied logic, as he has studied mathematics, he would not have confounded an antecedent with a cause, a consequent with an effect. There is a sophism against which logic, the discipline of unconfused thinking, puts us on our guard, and which is technically called the "*Post hoc, ergo Propter hoc.*" Of this fallacy Dr Whewell is, in this his one selected instance, guilty. And how? English law has less of principle, and more of detail, than any other national jurisprudence. Its theory can be conquered, not by force of intellect alone; and success in its practice requires, with a strong memory, a capacity of the most continuous, of the most irksome application. Now mathematical study requires this likewise; it therefore tests, no doubt, to this extent, "the bottom" of the student. But, because a great English Lawyer has been a Cambridge Wrangler, it is a curious logic to maintain, *that mathematical study conduces to legal proficiency.* The Cambridge honour only shows, that a man has in him, by nature, one condition of a good English lawyer. And we might as well allege, in trying the blood of a terrier puppy, by holding him up from ear or paw, that the suspension itself

was the *cause* of his proving "of the right sort;" as that mathematical study *bestowed* his power of dogged application, far less his power of legal logic, on the future counsellor.

The *second*:—"I have already noticed," concludes Dr Whewell, "how well the training of the college appears to prepare men to become good lawyers. I will add, that I conceive our *Physicians* to be the first in the world," &c. (Ib. p. 51.)—I should be glad if Dr Whewell had specified these paragons, who with a modesty as transcendent as their merit, hide their talent under a bushel; for of their reputations, discoveries—of their very names, I confess myself profoundly ignorant, and suspect that the world is not better informed, touching those who are its "*first physicians*." But this *fact*, is it not on a level with the previous *reasoning*?

What then are we finally to think of the assertion so confidently made, that—"Mathematics form logical habits better than Logic itself?" As the elegant Lagomarsini, ("vir melioris Latinitatis peritissimus," to use the words of Ruhnkenius), in his Oration on the Grammar Schools of Italy, said in reference to an English criticism,—in fact Locke's:—"Hoc tantum dicam; tunc me æquo animo de re latina præcipientes, Italorumque in ea tractanda rationem reprehendentes, Britannos homines auditurum, quum aliquid vere latinum (quod jamdiu desideramus) ab se elaboratum ad nos ex illo oceano suo miserint:" so for us, it will be time enough to listen to any Cambridge disparagement of non-mathematical logic, when a bit of reasoning has issued from that University, in praise of mathematical logic, not itself in violation of all logical law,—for such, as yet, certainly, has never been vouchsafed. In truth, we need look no farther than the Cambridge panegyrics themselves of mathematical study, to see how illogical are the habits which a too exclusive devotion to that study fosters.—But this is not the worst.

For one man of genuine talent and accomplishment, who has sacrificed to the Moloch of Cambridge idolatry, how many illiterate incapables do the lists of mathematical Wranglers exhibit! How many noble minds has a forced application to mathematical study reduced to idiocy or madness! How many generous victims (they "died and made no sign,") have perished, and been forgotten, in or after the pursuit of a mathematical Honour! And this melancholy observation has been long familiarly made even in Cambridge itself; yet the torturing slaughterhouse is unabated! *

* With others, above, and especially the two testimonies from the Quarterly Review (pp. 321, 322,) see the Cambridge pamphlet lately published by a "Member of the Senate," entitled "The Next Step," (p. 43). The author, likewise, refers to a pamphlet (which I have not seen) by Mr Blakesley, for a corresponding statement.

II.—ON THE CONDITIONS OF CLASSICAL LEARNING.

WITH RELATION TO THE DEFENCE OF CLASSICAL
INSTRUCTION BY PROFESSOR PILLANS.

(OCTOBER, 1836.)

Three Lectures on the Proper Objects and Methods of Education in reference to the different Orders of Society; and on the relative Utility of Classical Instruction. Delivered in the University of Edinburgh, November, 1835. By JAMES PILLANS, M.A., F.R.S.E., Professor of Humanity in that University. 8vo. Edinburgh: 1836.

WE regret that circumstances prevented our noticing these discourses in either of our last Numbers. They are a good word spoken in due season; and sure we are, that it will not be spoken in vain, if our Scottish countrymen are not wholly disabled from appreciating at their real value, this vindication of classical studies, and the objections by which they have been here recently assailed. It would, however, be a disparagement of these lectures to view them as only of temporary and local value; far less, as merely an answer to what all entitled to an opinion on the matter must view as undeserving of refutation or notice—on its own account. They form, in fact, a valuable contribution to the philosophy of education; and, in particular, one of the ablest expositions we possess of the importance of philological studies in the higher cultivation of the mind. As an occasional publication, the answer does too much honour to the attack. Indeed, the only melancholy manifestation in the opposition now raised to the established course of classical instruction, is not the fact of such opposition; but that

arguments in themselves so futile,—arguments which, in other countries, would have been treated only with neglect, should in Scotland not have been wholly harmless. If such attacks have had their influence on the public mind, this affords only another proof, not that ancient literature is with us studied too much, but that it is studied far too little. Where classical learning has been vigorously cultivated, the most powerful attacks have only ended in the purification and improvement of its study. In Germany and Holland, in Italy, and even in France, objections, not unreasonably, have been made to an exclusive and indiscriminate classical education; but the experimental changes they determined, have only shown in their result: that ancient literature may be more effectually cultivated in the school, if not cultivated alone; and that whilst its study, if properly directed, is, absolutely, the best mean toward an harmonious development of the faculties,—the one end of all liberal education; yet, that this mean is not always, relatively, the best, when circumstances do not allow of its full and adequate application.

It is natural that men should be inclined to soothe their vanity with the belief, that what they do not themselves know is not worth knowing; and that they should find it easy to convert others, who are equally ignorant, to the same opinion, is what might also confidently be presumed. “Ce n'est pas merveille, si ceux qui n'ont jamais mangé de bonnes choses, ne savent que c'est de bonnes viandes.” On this principle, Scotland is the country of all others in which every disparagement of classical learning might be expected to be least unsuccessful. For it is the country where, from an accumulation of circumstances, the public mind has been long most feebly applied to the study of antiquity, and where it is daily more and more diverted to other departments of knowledge. A summary indication of the more important of these circumstances may suffice to show, that the neglect of classical learning in Scotland is owing, neither to the inferior value of that learning in itself, nor to any want of capacity in our countrymen for its cultivation.

There are two principal conditions of the prosperity of classical studies in a country. The one,—*The necessity there imposed of a classical training for the three learned professions*; the other,—*The efficiency of its public schools and universities in the promotion of classical erudition*. These two conditions, it is evident, severally infer each other. For, on the one hand, where a certain

amount and quality of learning is requisite for the successful cultivation of the Law, Medicine, and Divinity of a country, this of itself necessitates the existence of Schools and Universities competent to its supply; and on the other, where an efficient system of classical education has become general, there the three professions naturally assume a more learned character, and demand a higher complement of erudition from their members. The prosperity of ancient learning is every where found dependent on these conditions; and these conditions are always found in harmony with each other. To explain the rise and decline of classical studies in different nations and periods, is therefore only to trace the circumstances which have in these modified the learned character of the professions, and the efficiency and application of the great public seminaries.

It would be foolish to imagine that the study of antiquity can ever of itself secure an adequate cultivation. How sweet soever are its fruits, they can only be enjoyed by those who have already fed upon its bitter roots. The higher and more peculiar its ultimate advantages and pleasures,—the more it educates to capacities of thought and feeling, which we should never otherwise have been taught to know or to exert,—and the more that what it accomplishes can be accomplished by it alone,—the less can those who have had no experience of its benefits ever conceive, far less estimate their importance. Other studies of more immediate profit and attraction will divert from it the great mass of applicable talent. Without external encouragement to classical pursuits, there can be no classical public in a country, there can be no brotherhood of scholars to excite, to appreciate, to applaud, —*συμφιλολογεῖν καὶ συνειθυναῖς*. The extensive diffusion of learning in a nation is even a requisite of its intensive cultivation. Numbers are the condition of an active emulation; for without a rivalry of many vigorous competitors there is little honour in the contest, and the standard of excellence will be ever low. For a few holders of the plough there are many pricklers of the oxen; and a score of Barneses are required as the possibility of a single Bentley.

In accounting, therefore, for the low state of classical erudition in Scotland, we shall, in the *first* place, indicate the causes why in this country an inferior amount of ancient learning has been long found sufficient for its Law, Medicine, and Divinity; and, in the *second*, explain how our Scottish Schools and Universities are so ill adapted for the promotion of that learning.

I. *The Professions.*—LAW can be only viewed as conducive to the cause of classical erudition, in so far as (what in most countries is the case) it renders necessary a knowledge of the Roman jurisprudence; the necessity of such a knowledge being, in fact, tantamount to a necessity for the cultivation of Latin history and literature. For while the Roman law affords the example of a completer and more self-connected system than the jurisprudence of any modern nation can exhibit; without a minute and comprehensive knowledge of that system in its relations and totality, its principles can neither be correctly understood, nor its conclusions with any certainty applied. This, however, is impossible, without a philological knowledge of the language in which this law is written, and an historical knowledge of the circumstances under which it was gradually developed. On the other hand, an acquaintance with the Roman jurisprudence has been always viewed as indispensable for the illustration of Latin philology and antiquities; insomuch, that in most countries of Europe, ancient literature and the Roman law have prospered or declined together: the most successful cultivators of either department have indeed been almost uniformly cultivators of both.—In *Italy*, Roman law and ancient literature revived together; and Alciatus was not vainer of his Latin poetry, than Politian of his interpretation of the Pandects.—In *France*, the critical study of the Roman jurisprudence was opened by Budæus, who died the most accomplished Grecian of his age; and in the following generation, Cujacius and Joseph Scaliger were only the leaders of an illustrious band, who combined, in almost equal proportions, law with literature, and literature with law.—To *Holland* the two studies migrated in company; and the high and permanent prosperity of the Dutch schools of jurisprudence has been at once the effect and the cause of the long celebrity of the Dutch schools of classical philology.—In *Germany*, the great scholars and civilians, who illustrated the sixteenth century, disappeared together; and with a few partial exceptions, they were not replaced until the middle of the eighteenth, when the kindred studies began, and have continued to flourish in reciprocal luxuriance.—Classical literature and Roman law owe less to the jurists of *England* than to those of any other country. The English common law is derived from sources which it requires no classical erudition to elucidate; in no other nation, except our own, has jurisprudence been less liberally cultivated as a general science,—more exclusively as a special

practice; and though of some recognised authority in certain English Courts, so little has the civil law been made an object of professional study, that an English lawyer rarely hazards an allusion to the Imperial Collections, without betraying his ignorance of their very titles. Classical learning has, however, been always laudably cultivated in England, and English jurists have accordingly sometimes acquired, as scholars, a legal erudition, wholly superfluous in professional practice. [This peculiarity of the English jurisprudence is noticed and commented on by John Barclay in his *Icon Animarum*.]

In *Scotland* the causes are different, although the result is nearly the same. In this kingdom the Roman jurisprudence formerly possessed a high, but always an indefinite, authority. It exerted a conspicuous influence on the genius and original development of the Scottish law; where not controlled by statute or custom, its determinations were usually admitted as decisive; and some of the most eminent of our jurists have even recognised it as the written law of Scotland. It was usual also, until a comparatively recent period, for those educated for the Scottish bar to study the Roman law under the illustrious civilians of France or Holland; and they returned from the continental universities, if not always profound scholars, more aware, at least, of the value of classical learning, and with a higher standard of classical attainment. Still, however, the authority of the Civil Law in Scotland was never strong enough to constrain the profession to its profound and universal study; and the necessity of resorting to foreign seminaries for the requisite education, showed that this could not adequately be procured at home. Among the myriads of works illustrative of Roman jurisprudence, we recollect not even one that has appeared in Scotland; and the little that has been done in this department by Scotsmen was executed abroad,—the result of foreign training, stimulus, and example. The profession can lay no claim to what Cuninghame proposed,—to what Scrymger and Henryson performed. But the authority of the Roman jurisprudence, and the consequent necessity of its study, was destined gradually to decline. The Scottish law became more and more reduced to statute; and after the union of the kingdoms was constrained to gravitate with an ever increasing velocity towards the indigenous and anti-Roman jurisprudence of England. The knowledge of the Roman system became always rarer and less profound. The judges, perhaps prudently, began

to neglect an authority which was seldom adequately understood ; and in Scottish practice a quotation from the Pandects now savours rather of ostentation than of use.

MEDICINE was formerly a profession which required a large amount of classical erudition ; and among the most illustrious scholars since the revival of letters, no inconsiderable number have been physicians. The practical importance of this learning in Scottish medicine has, however, been long gradually falling. Hippocrates and Galen are not now the authorities. Medical works are no longer written and read only in Latin ; nay, the late Dr Gregory (the "Ultimus Romanorum,") apologizes in his "Conspectus" for not abandoning a language which promised ere long to be unintelligible to his professional brethren. The future physician does not now resort to the classical schools of Leyden and Padua ; and in the universities of Scotland, the language of the learned has been dispensed with, not only in medical lectures, but in medical examination. [In the chief of these, literary qualification is indeed tested only by the professional teachers ; while the proportion of graduates has risen as the number of students has fallen off : so that a Scottish degree in medicine is now a valid guarantee of no higher classical accomplishment, than the licence from a Surgical College or certificate from an Apothecaries' Hall,—if even that. But was it for this, that the privilege is entrusted to a University of conferring the "Summi in Medicina Honores" ?]

THEOLOGY, however, far more than either Law or Medicine, affords an effectual support to classical studies ; for Christian, and more especially, Protestant, theology is little else than an *applied philology and criticism* ; of which the basis is a profound knowledge of the languages and history of the ancient world. To be a competent Divine is, in fact, to be a learned scholar.

Christianity is founded upon *Miracles* ; but these miracles are not continued, and the proof of their original occurrence is consequently left to human learning as a matter of historical evidence. —Again, Revelation, under either dispensation, was made through *writers divinely authorized and inspired*. But in some cases it is doubted, whether certain of these writers have been actually inspired ; and in others, whether the works purporting to have been written by them are actually theirs. This necessitates profound researches in regard to the authors of the several writings, —to the time when,—to the circumstances under which,—to the place where,—and to the persons for whom, they were first writ-

ten. It behoves, to discover all that is known or not known touching the first publication of these writings,—what is historically certain or probable as to their original recognition, and annexation to the general collection of inspired writings,—and, in fine, all that is known of the fate, of the contradiction it encountered, and of the changes which this collection or *Canon* may have undergone.

The vehicle of revelation is *Writing*; and no miracle was vouchsafed to preserve the sacred documents from the fate of other ancient manuscripts, or to prevent the omissions, changes, and interpolations of careless or perfidious transcribers, through the period of fourteen centuries. This was left to the resources of human *Criticism*; and the task requires for its accomplishment the profoundest scholarship. The collation of the most ancient manuscripts, the discrimination of their families, and a comparison of the oldest versions, may afford certain valuable *criteria*; but the one paramount and indispensable condition for the determination of the genuine reading, is a familiar acquaintance with the spirit of the languages in which the sacred volume is written.

Interpretation, therefore, is not only the most extensive and arduous, but the most important function of the theologian;—that is, an inquiry into the sense of the inspired writings, and an exposition of the truths which they contain.—To speak only of the New Testament. God did not select for his apostles the eloquent and the learned. It is, therefore, necessary to evolve the sense from the phraseology of unlearned men, writing also in a language not their own. At the same time, the circumstances which determined the associations and course of thought, and consequently explain the meaning of the authors, are to be discovered only through a knowledge of the literature to which the writings belong,—of the age in which they appeared,—of the particular public whom they addressed,—and of the circumstances under which they were produced. Add to this, that the original language, though Hellenistic Greek, is yet in a great part immediately, and in a still greater, translated from the Aramaic or Syro-Chaldaean; and it is universally admitted by the learned, that without a knowledge of the various Semitic dialects, it is impossible to enter thoroughly into that peculiar character of thought and expression, which is necessary to be understood, to understand the real import of the vehicle in which revelation is conveyed. The interpretation of the sacred books

thus supposes a *profound and extensive knowledge of the languages of antiquity*, not merely in their words, but in their *spirit*; and an *intimate familiarity with the historical circumstances of the period*, which can only be acquired through a comprehensive study of the contemporary authors.

It is thus evident, on the one hand, that no country can possess a theology without also possessing a philological erudition; and on the other, that if it possess a philological erudition, it possesses (not a theology indeed, but) the *one necessary condition* of a theology. Now, for nearly two centuries, *Scotland*, compared with other countries, may be broadly said to have been *without a theology*; but as no other country has been more strongly actuated by religious interests, it cannot be supposed that its clergy held in their hands the condition of a theology which (overlooking two qualified exceptions) has been never realised by any. What then are the peculiar circumstances which caused, or which allowed, the Scottish Church to remain so far behind all other national establishments in theological, and, consequently, in classical erudition? [See also Education, No. iii.]

In the *first* place, the Reformation in Scotland, and the constitution of the Scottish Church, were not indigenous,—were not the conclusions of a native theology. In Scotland the new opinions were a communication from abroad. The polity and principles of the Scottish Church were borrowed,—borrowed from Calvin and Geneva; and it was only one, and one of the least prominent, of the many Calvinist and Presbyterian Churches throughout Europe. At the same time, it was neither the creature nor the favourite of the Prince. The defence of that modification of Christianity established in Scotland was thus no peculiar, no principal point of honour with the nation or the state; and the Scottish clergy, geographically remote from the great centre of European polemic, were able, without manifest discredit, to devolve upon the kindred communions the vindication of their common polity and doctrine.—In this respect the *English Church* exhibits a striking contrast to the Scotch. The former stood alone among the Protestant communions. It was at once opposed to these and to the Church of Rome. It was the establishment of a great and prominent nation; and the personal and political honour of the Monarch—the dispenser of its high distinctions and emoluments—was long deeply interested in its credit and support. The Church of England was thus, from its origin, in a relation of hostility to

every other. Polemical it must be; and in the general warfare—the warfare against all and sundry, which it waged, as it possessed the means, so it had every motive to reward, in its champions, the higher qualities of theological prowess. If the Church of England could dispense with a *learned clergy*, it could not dispense with a *complement of learned divines*.

In the *second* place, the determination given to the Church of Scotland by those through whom it was established was not one of erudition.

In *Germany* the Reformation proceeded from, and was principally carried through by, the *academical divines*; the Princes, the free Cities, the Nation, and the Church, only obeyed the impulsion first given and subsequently continued from the Universities. In its origin the religious revolution was, in the Empire, a learned revolution; and every permanent modification, every important movement in its progress, had some learned theologian, not perhaps a clergyman, for its author. From this character of the Reformation in Germany, the determination of religious dogmas was there naturally viewed as a privilege of *erudition*,—as more the function of the Universities than of the Church, the People, or the State.* Religion consequently remained in the German schools a matter peculiarly proposed for learned investigation; the authority of Confessions was not long allowed to suspend the Protestant right of inquiry; and the alarming freedom with which this right has been latterly exercised by the Lutheran divines, may be traced back to the license and example even of Luther himself. In Germany, indeed, theology necessarily shared the fate of classical learning. The causes which, from the conclusion of the sixteenth century, depressed the latter, reduced the former to a shallow and barbarous polemic; and the revival

* [It is a significant illustration of the independence, in protestant Germany, of academical theology upon the Church, that there a layman (I mean, one who has not been even licensed for a pastor), may be, and very commonly is, a member of the Theological Faculty of a University,—a Doctor, a Professor of Divinity. For example:—Melancthon, the principal theologian of Wittenberg, and of the Reformation, was never in any sense a clergyman, an ordained minister; and Eichhorn, previously only a Professor in the Faculty of Philosophy in the University of Göttingen, and to all intents a laic, became entitled to deliver lectures, as one of the Theological Faculty, simply by that Faculty conferring on him its degree. (On this matter there might a great deal more be said, but I refrain.) In fact, the greater number of those Germans known to us as illustrious Divines, and Professors of Divinity, are and have been simple laymen.]

of the study of antiquity, from the middle of the eighteenth, was principally the condition, and partly the consequence, of a revival of theological learning.

In *England* the peculiar form under which the Reformation was established was principally determined by the *royal will*. But the very fact that the Church of England was neither in its origin the free creation of a learned theology, nor the spontaneous choice of a persuaded people, only enhanced the necessity of a higher erudition to illustrate and to defend it when established. Besides standing, in Europe, opposed to every other establishment and communion, it was, in its own country, surrounded by a more powerful host of sectaries than any other national church;—who, originally hostile to its polity and privileges, became, on its conversion from Calvinism, by Laud, the more deadly enemies of its doctrine. The difficulty and increasing danger of this position kept up an unceasing necessity for able and erudite defenders; and as honours and riches were not stinted as the price, the supply of the commodity was hardly inferior to the demand.

The Church of *Scotland*, on the contrary, was neither the offspring of learning nor of power; it was the *choice of an unlearned people*, and after being long upheld by the nation in defiance of every effort of the government, it was finally established by a revolution.

As the Scottish Reformation did not originate in native learning, so it did not even come recommended to the Scottish people, by the learned authority of its propagators. In relation to other national Reformers, the Reformer of Scotland was an unlettered man. "Compared with Knox," says a great German historian, (Spittler,) "Luther was but a timorous boy;"—but if Knox surpassed Luther himself in intrepidity, even Luther was a learned theologian by the side of Knox. With the exception of Melville, who obtained what erudition he possessed abroad, the religion of the people of Scotland could boast of no theologian, living in Scotland, worthy of the name. Of "*Scoti extra Scotiam agentes*" we do not here speak. Some remarkable divines Scotland has indeed possessed; but these were all adherents of that church, which for a season was established by the will of the monarch in opposition to the wishes of the nation. The two Forbeses, to say nothing of Leighton, Burnet, and Sage, were Episcopalians. In fact the want of popular support made it necessary

for the divines of that establishment to compensate by the strength of their theological learning for the weakness of their political position. The struggle which ensued between the Episcopal and Presbyterian parties was, from first to last, more a popular than a scientific,—more a civil than a theological contest; and the Covenanters, whose zeal and fortitude finally wrought out the establishment of the religion and liberty of the nation, were unlearned as they were enthusiastic. With the triumph of the Presbyterian polity and doctrines, the controversy between the rival persuasions ceased. The Scottish Episcopalians were few in numbers, and long politically repressed; and the other separatists from the establishment, so far from being, as in England, the enemies of the dominant church, were in reality its useful friends. They pitched in general somewhat higher the principles which they held in common with the establishment; and whereas in England the Dissenters would have radically destroyed what they condemned as vicious, in Scotland they wished only, as they in fact contributed, to brace what they viewed as relaxed. Thus, in Scotland, if seetarian controversy did not wholly cease, theological erudition was not required for its prosecution. The learning of the Dissenters did not put to shame the ignorance of the Establishment; and the people were so well satisfied with their own triumph, and their adopted church, that its clergy had no call on them for an erudition, to illustrate what was already respected, or to vindicate what was not assailed.* Even the attacks on Chris-

* [When yet comparatively learned,—before its secure establishment, and the consequent slumber into which it was allowed to sink, the Presbyterian Church of Scotland, sensible of its deficiencies, sought, more especially from Holland, for theologians and scholars who might raise the fallen and falling standard of its aspirants to the ministry. This consciousness of self-deficiency is an honourable testimony to the older Church. Of these movements, I am aware of *two*, and of these I now write merely from recollection. The one will be found in the records of an Assembly, during what has here been called “the Second Reformation;” the other is recorded by Calamy, in the memoirs of his own life, who mentions, that when a student in Holland he there met Carstairs, on a mission into that country to recruit for persons qualified to fill the chairs in the several Universities of Scotland. How this effort unfortunately failed, I am unable to state.—But what is worse. For a long time, many of the better order of students intending for the ministry, used to resort to the Dutch universities in quest of a higher education than they could obtain in their own country. Late in the last century this was put a stop to, by the General Assembly resolving, that attendance in any foreign university should not be allowed to count for a part of the academi-

tianity which were subsequently made in Scotland, and which it was therefore more immediately incumbent on the Scottish clergy to repel, were not such as it required any theological erudition to meet; while, from the religious dispositions of the public, these attacks remained always rather a scandal than a danger. At the same time, in no other country was there so little verge, far less encouragement, allowed to theological speculation. The standards of Scottish orthodoxy were more articulate and unambiguous than those of any other church; and to its members the permissible result of all inquiry was in proportion rigorously predetermined. Though often ignorantly mistaken, often intentionally misunderstood, the national creed could not, as in other countries, by any section of the established clergy, be either professedly abandoned or openly attacked. In religious controversy, popular opinion remained always the supreme tribunal; and a clamour, when this could be excited, was at once decisive of victory. At the same time the highest aim of clerical accomplishment was to preach a popular discourse. Under the former system of church patronage, this was always a *principal* condition of success; under the present, it promises to be soon the *only* one.* Theological learning remained thus superfluous, if not unsafe.

eal course required for admission into the Scottish church. Thus was Scotland completely isolated; native ignorance was no longer put to shame by foreign learning; and the standard of Scottish theology, never high, was finally reduced to the lowest. There may have been reasons for this enactment; but such also was its unfortunate effect.]

* [This was written soon after the passing of what is called the "Veto Act" by the General Assembly of the Church of Scotland, which (in the face of reason, and in ignorance of all theological history) declared, as *ancient* and *indefeasible*, the right of the people to refuse, *without reasons*, any pastor presented to them; and before this Act had been (rightly) pronounced, by the competent tribunals, illegal. Illegal: for, by the Westminster Confession, a *new* law or constitution of the Church can only be established by the concurrence of *two* legislative authorities,—the ecclesiastical and the civil; and this "Veto Act" was only *unilateral*, and only by mistake supposed declaratory of an *old* right. Had the measure, indeed, gone to compel an adequate *education and trial* of the clergy,—had it provided that none should assume the character of pastor who was not fully competent to pastoral duties,—and that each parish should obtain, among qualified candidates, the minister best suited to its reasonable wants;—had it, in fact, gone to abolish private patronage,—and declared as imperative, *all that the national Church, in this, or any other Protestant state, had ever even sought—sought, be it noted,—successfully or not, to confer upon the people: in that case I, for one, should have wished it all success.* But —.]

Nor, in the *third* place, must it be overlooked, that the laudable accommodation of the *Scottish* Church to its essential end,—the religious instruction of the people,—secured it consideration and usefulness without any high attainment in theological science. This, indeed, it neither felt as necessary, nor possessed the means of encouraging. Ecclesiastical property was fairly applied to ecclesiastical purposes; and the duties and salaries of the clergy were neither inadequately nor unequally apportioned. If the professional education of the churchman was defective, still it was better than none. If not learned, he was rarely incompetent to parochial duties, which he could not neglect; while his religious and moral character were respectable and respected. The people of Scotland were justly (at least in its earlier times) contented with their Church.

In the Church of *England*, on the contrary, the splendour of extraordinary learning was requisite to throw into the shade its manifold defects and abuses;—its want of professional education,—its pluralities,—its sinecures,—its non-residence,—its princely pampering of the few,—its beggarly starvation of the many. The grosser the ignorance which it tolerated, the more distinguished must be the erudition which it encouraged; and in the distribution of its higher honours, the promotion of merit, in some cases, was even necessary to redeem the privilege of neglecting it in general. Thus the different circumstances of the two churches rendered the clergy of the one, *neither ignorant nor learned*; of the other, *ignorant and learned at once*.

The circumstance, however, of most decisive influence on the erudition of a clergy is the quality and amount of the preparatory and professional education they receive. As almost exclusively bred in the common schools and universities of a country, and their necessary course of education being in general considerably longer than that of the other learned professions, the clergy consequently express more fully and fairly than any other class the excellences and defects of the native seminaries. On the other hand, the quality and amount of their learning principally determine for good or evil the character of the whole education, public and private, of a country; for the clergy, or those trained for the church, constitute not only the most numerous body of literary men, but the class from which tutors, schoolmasters, and even professors, are principally taken. Their ignorance or erudition thus reacts most powerfully and extensively, either

to raise and keep up learning, or to prevent its rising among all orders and professions. *The standard of learning in a national clergy is, in fact, the standard of learning in a nation.*

This leads us to the second general condition of classical erudition.

II. *The system of Schools and Universities.*—And in Scotland our higher and lower seminaries are, perhaps, worse calculated for the promotion of ancient learning than those of any other European country.

No other country is so defective in the very foundation of a classical instruction,—the number and quality of Grammar Schools. England has its five hundred of these, publicly endowed: how many has Scotland! The attempt to supply this want by making the parochial schoolmaster teach the elements of Latin,—Greek is out of the question,—proclaims but does not remedy the deficiency. If sometimes hardly competent to the work of primary education, this functionary is rarely qualified for a classical instructor. Yet to his incompetency has, in general, been abandoned the preparation of the future clergy and schoolmasters of the nation. It is, indeed, only of late years that a few grammar schools have ventured upon Greek; the alphabet of which is, by country students at least, still usually acquired in the university. The universities were, indeed, obliged, changing their proper character, to stoop, in order to supply the absence or the incompetency of the inferior seminaries. To do this adequately was, in the circumstances, impossible. Professorial prelections are no substitute for scholastic discipline.* Prematurely matriculated, the student often completed his academical course of philology, before boys in other countries had finished school; and, in his progress through the superior classes, he soon forgot the scantling of the languages which, if he ever obtained, he had now no longer any occasion to employ. Even in the long course of academical instruction, to which the future churchman was astricted, a few trifling exercises of form are all, we believe, that render some knowledge of Latin a convenient accomplishment.—

* [It is part and parcel of its general defect in scholarship, that the want of grammar or classical schools throughout the country has never, for some two centuries, been felt by our Church. A tythe of the agitation fruitlessly expended on some mistaken object, would have succeeded in forcing the state to remedy this opprobrium, which has so long and so heavily weighed on the clergy and people of Scotland.]

What, in fine, is the character of his professional examination? It is peculiar to Scotland, that the candidate for holy orders is tried, not by one or a few responsible individuals, specially nominated for that purpose from superior erudition and ability; but left to the *low standard and fortuitous examination* of all or any members of the Presbytery (clergy of a district) to which he may apply. This perhaps is worse even than the examination by a Bishop's Chaplain; but the English and Scottish Churches have, between them, the worst tests of clerical competency in Christendom.

Nor even indirectly was there encouragement of any kind presented by the universities for proficiency in classical attainments. The Degree in Arts, as it conferred no honour, was no object of ambition; and when not an empty compliment, a minimum of the learned languages sufficed for the examination.*

Of old, the Scottish educational system was a more effectual mean of classical instruction than it proves at present; but that it was never adequate to this end is proved by two facts, to which, on a former occasion, [Ed. No. iii.] we have alluded.—The first:—that although a trifling proportion of the educated ranks could have received their instruction and literary impulses abroad; yet of Scottish scholars, all of the highest celebrity, and far more than nine-tenths of those, worthy of the name at all, have been either educated in foreign seminaries, or their tastes and studies determined in the society of foreign learned men.—The second:—that although in other countries the clergy take, as a class, the highest place in the higher regions of erudition; yet in Scotland, from their dependence on the native seminaries for education, they have remained comparatively inferior in classical learning; almost

* [In Edinburgh, a greater amount of knowledge is ostensibly required for this degree than in any other University; but no other University can accept less, no other, I believe, accepts so little. The fundamental principle of academical graduation, *not to ask more than must be given*, is here, not only violated, but reversed. Had there been any prospect of a reform from without, I should long ago have proclaimed the evils to be amended; and having no hope of a reform from within, it is now (I deem it proper publicly to state) many years since I overtly withdrew from every responsibility in the discharge of this, as of all other trusts, reposed in the *Senatus Academicus*.—One very simple remedy for, at least, the most disgraceful part of the degrees in Medicine and in Arts, would be to make it necessary for the candidate to pass, for a *preliminary minimum*, an examination by some extra academical and disinterested board, taken, say, from the Masters of the High School or Edinburgh Academy, either or both.]

every scholar of distinguished note having, for nearly two centuries, been found among the laity.

For those able to supply their development, the preceding hints may suffice, to explain the causes of the low state of classical learning in Scotland. In fact, were it not for the neighbourhood and ascendancy of England, and that a considerable proportion of those who give a bias to public opinion receive their education and literary convictions out of Scotland, we are almost disposed to believe that in this country, Greek and Latin would long ere now have been studied, as we study Hebrew or Sanscrit. As it is, these influences are only decisive in the capital; and even here the opinion of the more intelligent in favour of the primary importance of classical education is encountered by a numerous opposition. It is, indeed, fortunate for Edinburgh, that its classical institutions have been powerfully upheld by the reputation and talents of their teachers; but all that individual men,—all that individual seminaries,—all that partial and precarious influences can effect, are insufficient to turn back that tide of circumstances, which threatens, unless some public effort may arrest it, to whelm in one flood of barbarism, all that is most conducive to our intellectual and moral well-being,—all that is not subsidiary to vulgar interests, and to the comforts of an animal existence.

The public is now awakening to the necessity of a better education for the people; our self-satisfied contentment with the sufficiency of our parish schools, is already dissipated even in Scotland; and the state cannot long withhold from the British nation what is already enjoyed by the other countries of Europe. But it is the duty of a government, not only to provide for the necessary instruction of the people, but also to promote the liberal education of the higher orders; and in particular to secure a competent erudition in the church, and the other privileged professions. In Scotland, how defective soever be the system of popular schools, this may be viewed as complete and perfect, compared with the system of grammar schools. Until a sufficient number of these be established over Scotland, and brought within the reach of those destined for an academical career, it is impossible that the universities can perform their proper function in the cultivation of learning; or that the professions, and the clergy in particular, should be insured in that amount and quality of classical knowledge which is requisite to place them on a level with their brethren in other countries. Nor until the patronage and

regulation of our universities be deposited in more enlightened and disinterested hands, can we hope that solid learning will receive the preference and encouragement which a university should afford; if academical, if liberal study is to be something higher than a mere popular cultivation of the amusing, of the palatable, of the vulgarly useful. Amid all the corruptions of Oxford, that university has maintained (from accidental circumstances, indeed,) this fundamental principle; and it is the maintenance of this principle, however imperfectly applied, that was mainly the ground of our conviction, that if the legislature do its duty, Oxford is the university susceptible of the easiest and most effectual regeneration.* [Education, No. iv.]

These observations have detained us too long from our author; and the length to which they have extended precludes us from offering, as we meant, some contributions of our own in connection with the argument which he so ably and conclusively maintains.

Professor Pillans opens the first Lecture with a rapid survey of national education in ancient and in modern times; and he justly attributes to the states of the Germanic Union the glory of having first practically realized it as a great principle of political morality,—that every government is bound to provide and to ensure the moral training and intellectual instruction of the whole body of its subjects. He shows the humiliating contrast in which Britain stands in this respect to the states of Germany; vindicates their enforcement of education by law; and accords a well-merited encomium to the enlightened magnanimity of France in profiting

* We have said nothing of the effect of endowments specially destined for the encouragement of learning, by enabling the beneficiary to devote himself, without distraction, to the pursuits of erudition. There can be no doubt that such a mean, if properly applied, might be of important service. But where they do actually exist,—as in England,—these endowments have seldom been found wisely administered, and their effect, upon the whole, has been injurious rather than beneficial. In point of fact, the countries of Europe where learning in general, and classical learning in particular, has been most successfully cultivated, as Holland and Protestant Germany, possess no advantages of the kind; and are only superior to Scotland in a completer organisation of schools, and a tolerable system of university patronage.—[See the next following article.]

by the experience, and in adopting the institutions of Prussia. After some valuable observations on the methods and principles of popular instruction, he signalizes the difference, in end and means, between the education of the lower and the education of the higher classes of society. . . .

In the second Lecture, after exposing that most contemptible of all delusions, that the mere possession of facts,—the simple swallowing of truths,—is the end proposed by education, and showing that it is not by the *amount of knowledge* communicated, but by the *amount of thought* which such knowledge calls into activity, that the mind is exercised and developed, our author proceeds to contrast the advantages in this respect of mathematical and classical instruction. We are gratified to find that our own conclusions in regard to the minor value of mathematical study as a mean of mental cultivation are not opposed to those of so high an authority in practical education; and that our convictions, both of the paramount utility, in this relation, of classical study, and of the errors by which, in practice, this utility is too often compromised, are in all respects the same with those of so philosophical a scholar. We must pass over his strictures on the great schools of England, in order to quote his unfavourable opinion of the organization of our Edinburgh classical schools;—an organization now peculiar, we believe, to Scotland, and which we have long been convinced is almost the only impediment that prevents the distinguished zeal and ability of their teachers from carrying these seminaries to their attainable perfection. On the present plan, a new class commences every year under a separate master; and the boys, however numerous, and however different in capacity, remain during four years—*i. e.*—until they enter under the Rector—the exclusive pupils of the same classical instructor, whose emoluments are in proportion to the number of his peculiar scholars. . . .

On the manifold disadvantages of this arrangement much might be said;—and we could quote a host of authorities in favour of the scheme of promotion and retardation, as determined by solemn terminal examinations;—a scheme for centuries established in Holland, Germany, and other continental countries. Buchanan, in his plan of a classical school, in his “*Opinion anent the Reformation of the Universitie of St Androis,*” orders “that the classes shall be visit every quarter of a year, and promovit after ther

merits." * In most countries this act takes place at half-yearly intervals.

In his third and last Lecture our author is occupied with his principal subject, the vindication of classical studies from the charge of inutility,—an easy matter; and the far more difficult task of illustrating the various and peculiar modes in which these studies exercise and improve the mind. We regret that we are unable to afford our readers more than a sample of his admirable observations. After a copious enumeration of the general advantages to be reaped from the study of the ancient authors, he proceeds:—

"But, again, it may be argued, Why might not all this be done, and done more compendiously and expeditiously, by taking the works of our own English authors for the substratum of this intellectual and moral training? My answer is, that, with such means, it could not, I think, be done at all."

"It is, indeed, a great and just boast of these languages (which have been called, from the circumstance, transpositive), that this liberty of arrangement enables the speaker or writer to dispose his thoughts to the best advantage, and to place in most prominent relief those which he wishes to be peculiarly impressive; and that thus they are pre-eminently fitted for the purposes of eloquence and poetry. It is owing to the same peculiarities in the structure of the ancient languages, that the writers in them were enabled to construct those long and curiously involved sentences, which any attempt to translate literally serves only to perplex and obscure; but which presented to the ancient reader, as they do to the modern imbued with his taste and perceptions, a beautiful, and, in spite of its complexity, a sweetly harmonizing system of thoughts. I have already alluded to the exertion of mind required to perceive all the bearings of such a sentence, as to an exercise well fitted for sharpening the faculties; and this view of the ancient tongues—considered as instruments of thought widely differing from, and in most respects

* Professor Pillans will be also pleased to find, from the same *Opinion*, which is, we believe, very little known, that his favourite "Monitorial System" was carried into effect by Buchanan. It has not been noticed that in this plan of studies Buchanan was greatly indebted to his friend Sturmius; and that great pedagogue is also a high authority in favour of the plan of instruction of the younger by older pupils. It had also previously been reduced to practice by Trozendorf. For centuries, it has been prudently applied in Schulpforte, the prime classical school of Europe. The compulsory lecturing,—the *necessary regency*,—of graduates or *inceptors* in the ancient universities mainly proceeded on the profound principle, *Doce ut Discas*. [Appendix III. (C) 5.] As the scholastic brocard runs:—

"*Discere si quæris, doceas, sic ipse doceris;*
Nam studio tali tibi proficis atque sodali."

superior to, our own—is one which recommends them to be used also as instruments of education.

"Again, our mother tongue is so entwined and identified with our early and ordinary habits of thinking and speaking, it forms so much a part of ourselves from the nursery upwards, that it is extremely difficult to place it, so to speak, at a sufficient distance from the mind's eye to discern its nature, or to judge of its proportions. It is, besides, so uncompounded in its structure,—so patchwork-like in its composition, so broken down into particles, so scanty in its inflections, and so simple in its fundamental rules of construction, that it is next to impossible to have a true grammatical notion of it, or to form indeed any correct ideas of grammar and philology at all, without being able to compare and contrast it with another language, and that other of a character essentially different."

Nothing has more contributed in this country to disparage the cause of classical education than the rendering it the education of all. That to many this education can be of little or no advantage, is a truth too manifest to be denied; and on this admission the sophism is natural, to convert "useless to many" into "useful to none." With us, the learned languages are at once taught too extensively, and not intensively enough; an absurdity in which we are now left almost alone in Europe. We may notice that the distinction of schools, to which, in the following passage, Mr Pillans alludes, is not peculiar to Prussia, but has been long universal in the German and Scandinavian states: even Russia has adopted it.

"The strongest case against the advocates for classical education, is the practice that has hitherto prevailed of making it so general as to include boys of whom it is known beforehand that they are to engage in the ordinary pursuits of trade and commerce; who are not intended to prosecute their education farther than school, and are not therefore likely to follow out the subject of their previous studies much, or at all, beyond the period of their attendance there.

"I willingly allow, and have already admitted, that a youth who looks forward from the very outset to the practice of some mechanical or even purely scientific art, may employ his time better, in acquiring manual dexterity and mathematical knowledge, than in making himself imperfectly acquainted with a dead language. There must be in all very large and populous towns, a class of persons in tolerably easy circumstances, and whose daily business affords them considerable leisure, but who contemplate for their children nothing beyond such acquirements as shall enable them to follow out the gainful occupation, and move in the narrow circle, in which they themselves, and their fathers before them, have spent a quiet and inoffensive life. It was for youth of this sort that the Prussian government, with a sagacity and foresight characteristic of all its educational proceedings, provided what are called *buerger* and *mittel-schulen*,—intermediate steps between the *volks-schulen*, and primary schools, and the *Gymnasien*, or *gelehrte-*

schulen; and the French have wisely followed the example of Prussia, by ordaining the establishment of *écoles moyennes*, called also *écoles primaires supérieures*, in all towns above a certain population."

From the specimens now adduced, the reader is enabled to form certainly a high, but by no means an adequate estimate of these lectures. To be properly appreciated, the whole reasoning must be studied in connection—which, we are confident, few, sincerely interested in the subject, will fail to do.

III.—ON THE PATRONAGE AND SUPERINTENDENCE OF UNIVERSITIES.

(APRIL, 1834.)

Report made to His Majesty, by a Royal Commission of Inquiry into the State of the Universities of Scotland. (Ordered by the House of Commons to be printed, 7th October, 1831.)

We have long had it in view to consider this Report, both with respect to what it contains, and to what it omits. At present we must limit ourselves to the latter head; and in particular shall endeavour to make up for its remarkable silence as to the systems of Academical Patronage in this country, their palpable defects, and the means of improvement. This, and the revision and formation of constitutions, were the only objects upon which its framers could have employed themselves beneficially; for it is of far more importance to secure good Teachers, than to make rules about Teaching; and it shall be our present endeavour to show in what way this primary end must be attained in principle, how it has been attained in other countries, and might be rendered attainable in our own. On a future occasion, we may perhaps make some observations on the more censurable parts of the Report with respect to Teaching and Academical Policy; meanwhile, we shall touch principally on the one capital omission now commemorated.

This omission, however singular it may appear, is not without excuse. During the ascendancy of those principles of government under which the Commission was constituted, to have deprived public trustees of their office only for incompetence and self-seeking, would have been felt a far-reaching and a very

dangerous precedent; and so long as The Great Corporation remained the pattern and the patron of corruption, to have attempted a reform of minor corporations would have been at once preposterous and unavailing. At the same time, the theory of educational establishments is so little understood in this country, and so total an ignorance prevails in regard to what has been practically accomplished in foreign Universities, past and present, that the Commissioners are hardly to be blamed for any limited and erroneous views of the imperfections of our academical system, or of the measures to be adopted for its improvement. To the same cause is it to be attributed, that while all admit, in proportion to their intelligence, the defective patronage of our Universities, there are few who do not resign themselves to a comfortless despair of the possibility of any important melioration. Yet, this despair is itself the principal,—indeed, the only obstacle to such a result. And to show that it is totally unfounded, that, in theory, the principles which regulate the right organization of academical patronage are few, simple, and self-evident, and that in practice, these have *always* proved successful, even when very rudely applied, is the purpose of the following observations. They pretend only to attract public attention to the subject; and fully convinced of the truth and expediency of our views, we regret that the exposition we can now afford them, is so inadequate to their paramount importance.

*Universities are establishments founded and privileged by the State for public purposes: they accomplish these purposes through their Professors; * and the right of choosing professors is a public Trust confided to an individual or body of men, solely to the end, that the persons best qualified for its duties, may be most certainly procured for the vacant chair.*—Let us explicate this definition of academical patronage in detail.

I. In the first place, in regard to the *nature* of academical patronage: †—That it is a *trust* conferred by, and to be adminis-

* Oxford and Cambridge are no exceptions. Inasmuch as they now accomplish nothing through their Professors, they are no longer *Universities*; and this even by their own statutes.

† The term Patron, as applied to those to whom the election of public functionaries is confided, is not unobjectionable; inasmuch as it comprehends both those who have at least a qualified right of property in the situations to which they nominate, and those who are *purely trustees for the community*. In the poverty of language, precision must, however, often bend to convenience.

tered solely for, the benefit of the public, no one, we are confident, will be intrepid enough to deny. On the part of a University patron, such denial would be virtually an act of official suicide. Assuming, therefore, this as incontrovertible, it necessarily follows:—

1°, That the reason of lodging this patronage in certain hands, was the belief, held at the time by the public or its administrators, that these were, under circumstances, the best qualified to work out the intention of the trust; consequently, if this belief be subsequently found erroneous, or, if circumstances change, so as to render either these hands less competent to discharge the duty, or others more; then is the only reason gone for the longer continuance of the patronage in the original trustees, and it forthwith becomes the duty of the State to consign it anew to worthier depositaries.

2°, That the patronage is wisely deposited in proportion as the depository is so circumstanced as to be kept ever conscious of his character of trustee, and made to appreciate highly the importance of his trust. Consequently, that organization is radically vicious, which conjoins in the same person, the trustee and the beneficiary; in other words, where the academical patron and professor are identical.

3°, That the patron has no claim to a continuance of his office, from the moment that the interest of the public demands its resumption, and transference to better hands.

II. In the second place, in regard to the *end* which academical patronage proposes,—the surest appointment of the highest qualifications,—it is evident that this implies two conditions in the patron:—1°, The capacity of discovering such qualifications; and, 2°, The inclination to render such discovery effectual.

1°, In regard to the *former*:—The capacity of discovering the highest qualifications is manifestly in proportion to the higher intelligence of the patron, and to the wider comprehension of his sphere of choice.—The intelligence of the patron requires no comment. As to his sphere of choice, this may either be limited by circumstances over which he has no control, or it may be contracted, without external necessity, by his own incapacity or want of will. Religion, country, language, &c., may, on the one hand, by law, exclude from his consideration the worthiest objects of preference; and on the other, the advantages attached to the office in his gift, may not afford an adequate inducement to those

whom he finds most deserving of his choice. For these a patron has not to answer. But if he allow himself to be restricted in his outlook by sectarian and party prejudices,—above all, if he confine his choice to those only who will condescend to *sue him* as candidates for the office; he certainly excludes from his consideration the greater proportion of those best qualified for the appointment, possibly even the whole; and the end of the trust confided to him remains most imperfectly accomplished.

2°, In regard to the *latter* condition,—the disposition in the patron to render the discovery of the best qualified persons available:—It is evident that his power to do this must depend on the temptation which he can hold out to their ambition.—A system of patronage is therefore good or bad, in proportion as it tends to elevate or degrade the value of its appointments; that is, as it tends to render them objects of competition or contempt. The value of an academical office, estimated by the inducements which it holds out to men of eminence, is a sum formed by an addition of sundry items. There are,—1°, The greater emolument attached to it; 2°, The less irksome and more intellectual character of its duty; 3°, The amenity of situation, the agreeable society, and other advantages of the town and country in which the University is situated. These are more or less beyond the power of the patron. But, in another way, it is in the power of patrons, and of patrons only, greatly to raise or sink the value of academical appointments. As the patronage is administered, the professorial body is illustrious or obscure, and the place of colleague either an honour or a discredit. In one University, an appointment is offered by a spontaneous call, and prized as a criterion of celebrity. In another, even the chance of success must be purchased by humiliation; success is but the triumph of favour, and an appointment the badge of servility and intrigue. Thus, under one set of patrons, a professorship will be accepted as a distinction by the person who would scorn to solicit, or even accept, a chair of *thrice* its emolument, under another. In one country the professorial status is high, and the academy robs the professions of the best abilities; in another, it is low, and the professions leave the academy, however amply endowed, only their refuse. Of this, the comparative history of the European Universities, and our own in particular, affords numerous and striking proofs.

III. In the third place, such being the *nature*, and such the *end*, of academical patronage, we must finally consider what is

the *proper organization of its instruments* ; in other words, what person or persons are most likely to feel intensely the obligations of the trust, and to be able to realize completely its intention. It is evident that the problem here, is, simply, how to find a patron, or how to constitute a board of patrons, that shall most certainly, and in the highest degree, possess these two qualities—*Good Will* and *Capacity*.

In regard to *good will*,—a patron will be well disposed precisely in proportion as he has motives more and stronger to fulfil, fewer and weaker to violate, his duty. The aim, therefore, of an enlightened scheme of patronage, is, in the first place, to supply him with as many as possible of the one class, and in the second, to remove from him as many as possible of the other.

As to the *supply of direct motives* :—Independently of the general interest which academic patrons, in common with all intelligent and patriotic citizens, must feel in the welfare of their Universities, it is evident, that motives peculiarly determining them to a zealous discharge of their trust, will be given by connecting their personal honour and dishonour with the appointment of worthy and unworthy professors ; and that this motive will be strong or weak, in proportion as, on the one hand, the honour or dishonour is more or less intense and enduring in its application, and, on the other, as the patrons are persons of a character more or less alive to the public opinion of their conduct. These conditions determine the following principles, as regulating the organization of a board of academical patronage.

1°, The patrons must be few : to the end that their responsibility may be concentrated ; in other words, that the praise or blame attributed to their acts may not be weakened by dissemination among numbers.

2°, The board of patrons must be specially constituted *ad hoc* ; at least, if it discharges any other function, that should be of an analogous and subordinate nature. Nothing tends more directly to lower, in the eyes of the patron and of the public, the importance of an academical patronage ; consequently, nothing tends more to enervate and turn off the credit or discredit attached to its acts, and to weaken the sense of responsibility felt in its discharge, than the right of appointing professors in general, or, still more, of appointing to individual chairs, being thrown in as an accidental, and consequently a minor duty, to be lightly performed by functionaries not chosen as competent to this par-

ticular duty, but constituted for a wholly different purpose.—But with its patronage is naturally conjoined as an inferior function, the general superintendence of a University; academical curators and patrons should in fact always be the same.

3°, Where a country possesses more than one University, each should have its separate board of patronage; in order that the patrons may have the motive of mutual emulation, and that public opinion may be formed on a comparative estimate.

4°, The patrons should be, at least, conditionally permanent; that is, not holding their office for life, but re-appointed, from time to time, if their conduct merit approval. And this for two reasons. Because honour and dishonour apply with less effect to a transitory patron,—seldom known and soon forgotten; and because as it is only after a considerable term of years that patrons can effect the elevation or decline of a University, so it is only a permanent patron who can feel a strong personal interest in the celebrity of a school, and to whom the glory of being the promoter of its prosperity, can operate as a high inducement.

5°, To impress more deeply on the patrons the obligations and importance of their office, they should make oath, in the most solemn manner, on their entrance upon office, to the impartial and diligent discharge of their duty; and perhaps in every report to the higher authority, they should declare upon their honour, and with special reference to their oath, that their choice has been determined, without favour, and solely by the pre-eminent qualifications of its object.

6°, The patrons will be most likely to appreciate highly the importance of their function, and to feel acutely the praise or reprobation which their acts deserve, if taken from the class of society inferior, but only inferior, to the highest. If a patron is appointed from his rank or station,—he is perhaps above the influence of public opinion; the office is to him only a subordinate distinction; and the very fact of his appointment, while it tells him that its duties are neither difficult nor momentous—for, was he selected for his ability to discharge them?—is in fact the most pernicious precedent to him in his own disposal of the patronage itself. If the patron be of a low rank, he is probably patron only by official accident; is too uninstructed to understand the importance of a duty thus abandoned to hazard; is too grovelling to be actuated by public opinion, and too obscure to be its object; while at the same time he is exposed to incentives to violate his

trust, strong in proportion to the impotence of the motives persuading its fulfilment. That patron will perform his duty best, who owes his nomination solely to his competence ; who regards the office as his chiefest honour ; and who, without being the slave of public opinion, which he should be qualified to guide, is neither above nor beneath its salutary influence.

The removal of all counter motives from a patron, to the discharge of his duty, or of all ability to carry such into effect, determines the following precautions :—

7°, The patrons must be a body as much as possible removed from the influence of personal motives, apart from or opposed to their preference of the most worthy. The professorial college will, therefore, of all others, not constitute the body by which it is itself elected.

8°, The patrons should have the virtual and recommendatory, but not the formal and definitive appointment. This should belong to a higher authority,—say a Minister of State. A non-acquiescence in their recommendation, which would of course necessitate their resignation, and throw them back on their electors, could never take place without strong reason : but its very possibility would tend effectually to prevent its occurrence.

9°, With the report of their decision, the patrons should be required to make an articulate statement of the grounds on which their opinion has been formed, that the object of their preference is the individual best qualified for the vacant chair.

Touching the quality of *capacity*—that is, the power of discovering and making effectual the discovery of the best accomplished individuals,—this affords the following conditions :—

1°, The patrons should be appointed specially *ad hoc*, and from their peculiar qualification for the discharge of the office.

2°, They should be men of integrity, prudence, and competent acquirement, animated by a love of literature and science, and of an unexclusive liberality ; in short, either knowing themselves, or able to discover, who are the individuals worthy of preference.

3°, The patronage should be vested in a small plurality. In more than one ;—to obviate the errors of individual judgment, and to resist the influences that might prove too powerful for a single will ; to secure the animation of numbers, a division of labour, more extensive, applicable, and impartial information, opposite views, and a many-sided discussion of their merits. Not in

many ;—that the requisite intelligence, &c., may be possessed by the whole body ; that the presence of all may be ensured ; that each may feel his importance, and co-operate in the inquiries and deliberations ; that they may understand each other ; take, in common, comprehensive, anticipative views ; and concur in active measures to obtain the object of their preference : for, be it remembered, a numerous body can elect only, out of those whom a situation suits ; a small body, out of those who suit the situation. Reasoning and experience prove that this patronage is best vested in a board varying from two to five members. Four is perhaps the preferable number ; the senior patron having, in case of divided opinions, a decisive suffrage.

4th. The office of academical patron should be permanent, under the condition we have already stated ; as no other is more dependent for its due discharge on the experience of the functionary, on the consistency and perseverance of his measures.

The principles thus manifest in *theory*, have been universally and exclusively approved in *practice*. Precisely as they have been purely and thoroughly applied, have Universities always risen to distinction ; precisely as they have been neglected or reversed, have Universities always sunk into contempt.

The *intrinsic excellence* of a school is not to be confounded with its *external prosperity*, estimated by the multitude of those who flock to it for education. Attendance may be compelled by exclusive privileges, or bribed by numerous endowments. [Its degree may be still required for this or that profession, though no longer furnishing a true certificate of the relative acquirement which it originally guaranteed. (The degrees of the English Universities.) Its degree, with ostensibly higher honours, may be offered at really as cheap a rate as the corresponding licence of less privileged incorporations. (The medical degrees of, some at least, of our Scottish Universities.)] The accident of its locality, as in a great city ; the cheapness of its instruction ; the distance of other seminaries, or seminaries of superior character ; and, withal, the low standard of learning in a nation, and the consequent ignorance of its defects, may all concur in causing the apparent prosperity of a University, which merits, from its real excellence, neither encouragement nor toleration. It is only when Universities are placed in competition, and that on equal terms, that the two attributes are convertible. To this explanation we must add another. Our assertion only applies to Universities in the circumstances of

their more modern co-existence. When the same religion, studies, and literary language, connected Europe into a single community; when Universities, cosmopolite in character, few in number, and affording the only organs, not of instruction and exercise merely, but of publication, counted by myriads the scholars they attracted from the most distant countries; when, opening to their graduates a free concurrence in the then all-glorious field of academical instruction, prelates, and even princes, sought to earn from the assembled nations the fame of talent, eloquence, and learning; then the best instructor naturally found his place, and an artificial patronage was as inexpedient as it would have proved impracticable. Its necessity arose during the progress of a total change of circumstances. When Christendom was shattered into fragments; when the Universities, multiplied to excess in every country, speaking each only its own vernacular, and dwindled to sectarian schools, no longer drew distant nations to their seat, and concentrated in a few foci the talent of the Christian world; when the necessity of personal congress at points of literary communication was superseded by the press; when the broad freedom of academical instruction was replaced by a narrow monopoly, and even the interest of the monopolists themselves remained no longer solely dependent on their ability and zeal;—in this complete reversal of all old relations, the necessity of a careful selection of the academical teacher arose, and henceforward the worth of Universities was regulated by the wisdom and integrity of those to whom this choice was confided.

The excellency of a University is to be estimated by a criterion compounded of these two elements:—1. The higher degree of learning and ability displayed by its professorial body; and, 2. The more general diffusion of these qualities among the members of that body.

Taking a general survey of the European Universities, in their co-existence and progress, and comparing them by this criterion, we find three groups prominently distinguished from the others, by the higher celebrity of a larger proportion of their professors. These are the *Italian*,—the *Dutch*,—and, for nearly the last hundred years, the *German Protestant* Universities. On examining their constitution, we find that the only circumstance of similarity among themselves, and of contrast to all others, is the machinery of their patronage and superintendence, consisting of a board of trustees specially constituted for the purpose, small, intelligent, perennial.

Of the three great Universities of ITALY, *Bologna, Padua, and Pisa*, our information is less precise in relation to the first; but, although the most wealthy and ancient of the Italian schools, Bologna did not continue to equal her two principal rivals in the average celebrity of her teachers. Of *Pavia* we need not speak.

The Italian were originally distinguished from the Transalpine Universities by *two* differences;—the early introduction of *salaried teachers*; and the *restriction of privileged instruction to these teachers*, who in Italy, as throughout the rest of Europe, enjoyed their salary under condition of gratuitous instruction. The evil consequences of such a system were, however, in Italy, counteracted by the circumstances under which it was carried into operation.

The endowed chairs were there of two kinds,—*Ordinary and Extraordinary*. The former, fewer in number, were generally of higher emolument than the latter. For each subject of importance there were always *two*, and commonly *three rival chairs*; and a powerful and ceaseless emulation was thus maintained among the teachers. The Ordinary Doctors strove to keep up their celebrity,—to merit a still more lucrative and creditable appointment,—and not to be surpassed by their junior competitors. The Extraordinary Doctors struggled to enhance their reputation,—to secure their re-election,—and to obtain a chair of higher emolument and honour.

The appointment, continuance, and dismissal of professors, long appertained to the Students, (there comparatively old,) who, in their Faculties and Nations, annually or biennially *elected* to all, or to a large proportion of the chairs.

In *Padua*, the policy of the Venetian Senate was, from the middle of the fifteenth century, (when the ancient numerous resort of the University had declined), directed to the restriction and abolition of this popular right, and after several fruitless, and sundry partial measures, the privilege was at length, in 1560, totally withdrawn. The Venetian Fathers were, however, too wise in their generation to dream of exercising this important function themselves. Under the Republic of Padua, the Princes of Carrara, and the Venetian domination, prior to 1515, *two*, and subsequently *four* Paduan citizens, of distinguished prudence, had been chosen to *watch over* the University, and to *suggest* the persons proper to be nominated to vacant chairs. In 1516, they were reduced to *three*, and the election of these academical Triumvirs

(*Triumviri Studiorum, Moderatores Academicæ, Riformatori dello Studio di Padova*,) intrusted to the six senators of the venerable College of Seniors, by whose wisdom the most important affairs of the Republic were administered. To this small and select body of Moderators, the Senate delegated the general care of the University, and, in particular, that of looking around through Europe for the individuals best qualified to supply the wants of the University. Nor were they easily satisfied. The plurality of concurrent chairs (which long continued) superseded the necessity of hasty nominations; and it not unfrequently happened that a principal Ordinary *was vacant for years*, before the *Triumvirs* found an individual sufficiently worthy of the situation. On the other hand, where the highest celebrity was possibly to be obtained, nothing could exceed the liberality of the Senate, or the zeal of the Moderators; and Padua was thus long eminently fortunate, in her competition for illustrious teachers with the most favoured Universities of Europe.

In *Pisa*, the students do not appear to have ever exercised so preponderant an influence in the election of their teachers as in Padua, or even Bologna. From the period of the restoration of the University by Lorenzo de' Medici, the academical patronage of the state was virtually exercised by a small, intelligent and responsible body. In 1472, the Senate of Florence decreed that *five Prefects* should be chosen out of the citizens, qualified for the magistracy, to whom should be confided the superintendence both of the Florentine and Pisan Universities. These were annually elected; but as re-election was competent, the body was in reality permanent. Lorenzo appears among the first. In 1543, Cosmo de' Medici gave new statutes to the University of Pisa, with which that of Florence had been united. By these, beside the Prefects, who were not resident in Pisa, a *Curator* or *Provisor* was established on the spot. This office was for life; not merely honorary, for attached to it was the Priorship of the Knights of St Stephen. The Curator was charged with the general superintendence of student and professor; and whatever directly or indirectly concerned the well-being of the University, was within his sphere. In the appointment of professors, he exercised a great and salutary influence. The Prefects were the definitive electors; it was, however, the proximate duty of the Curator to look around for the individuals suited to the wants of the University, and to bring their merits under the judgment of the Prefects. How be-

officially the Curator and Prefects acted as mutual stimuli and checks, requires no comment.

By this excellent organisation of the bodies to whom their academical patronage was confided, Padua and Pisa, in spite of many unfavourable circumstances, long maintained a distinguished reputation; nor was it until the system which had determined their celebrity was adopted and refined in other seminaries, that they lost the decided pre-eminence among the Universities of Europe. From the integrity of their patrons, and the lofty standard by which they judged, the call to a Paduan or Pisan chair was deemed the highest of all literary honours. The status of Professor was in Italy elevated to a dignity, which in other countries it has never reached; and not a few of the most illustrious teachers in the Italian seminaries, were of the proudest nobility of the land. While the Universities of other countries had fallen from Christian and cosmopolite, to sectarian and local schools, it is the peculiar glory of the Italian, that under the enlightened liberality of their patrons, they still continued to assert their European universality. Creed and country were in them no bar; the latter not even a reason of preference. Foreigners of every nation are to be found among their professors; and the most learned man of Scotland (Dempster) sought in a Pisan chair, that theatre for his abilities which he could not find at home. When Calvinist Leyden was expatriating her second Boerhaave, the Catholic Van Swieten; Catholic Pisa had drawn from Leyden the Calvinist foreigner Gronovius. In Schismatic England, a single sect excludes all others from the privileges of University instruction; in Catholic Italy, even the academic chairs have not been closed against the heretic.

The system was, however, carried to a higher perfection in the Dutch Universities; and notwithstanding some impediments arising from religious restrictions, (subsequent to the Synod of Dordt,) its efficacy was in them still more conspicuously displayed.

It was first realised in *Leyden*, the oldest of these seminaries; and from the greater means and more extensive privileges of that University, whose degrees were favoured throughout France, its operation was there more decisive.

In reward of the heroic defence made by the citizens in the memorable siege of Leyden, they received from the States their choice of an immunity from taxation, or of a University. They

chose the latter. But though a recompense to the city, and though the civic aristocracy was in no other country so preponderant as in Holland, the patronage of the new establishment was not asked by, nor conceded to, the municipality. Independently of reason, experience had shown the evil effects of such a constitution in the neighbouring University of *Louvain*, where the magistrates and the professors rivalled each other in their character of patrons, to prove, by a memorable example, how the wealthiest endowments, and the most extensive privileges, only co-operate with a vicious system of patronage in sinking a venerable school into contempt. The appointment of professors, and the general superintendence of the new University, were confided to a body of *three Curators*, with whom was associated the *Mayor of Leyden* for the time being. One of these Curators was taken from the body of nobles, and chosen by them; the two others, drawn from the cities of Holland, or from the courts of justice, were elected by the States of the province. The duration of the office was originally for nine years, but custom soon prolonged it for life. The Curators were recompensed by the high distinction of their office, but were allowed a learned secretary, with a salary proportioned to his trouble.

The system thus established continues, to the present hour, in principle the same; but the changes in the political circumstances of the country have necessarily occasioned changes in the constitution of the body,—whether for the interest of the University is still a doubtful problem. Until the revolutionary epoch, no alteration was attempted in the college of Curators; and its permanence, amid the ruin of almost every ancient institution, proves, independently of other evidence, that all parties were at one in regard to its virtue and efficiency. In 1795, the four Curators were increased to *five*, and all made permanent. Of these, three were elected by the national delegates, two by the municipality of Leyden; and the spirit in which they were chosen, even during the frenzy of the period, is shown in the appointments of Santeinius and De Bosch,—the most illustrious scholars in the curatory since the ago of Douza. On the restoration of the House of Orange, and establishment of the Kingdom of the Netherlands, a uniform constitution was given to the Batavian and Belgian Universities. By the statutes promulgated in 1815 for the former, and in 1816 for the latter, it is provided that “in each University” (these were now *Leyden*, *Utrecht*, and *Groningen*, *Louvain*,

Ghent, and Liege,) "there shall be a board of Curators, consisting of five persons, distinguished both by their love of literature and the sciences, and by their rank in society." "The Curators shall take precedence according to the date of their appointment;" but in the statutes of the Belgian Universities, it is stated, "The President shall be named by the King, and must be resident in the town where the University is established." "These curators shall be nominated immediately by the King, and chosen,—at least three-fifths of them,—in the province where the University is established; the two others may be chosen from the adjacent provinces." "The chief magistrate of the town in which the University is situated, is, in virtue, but only during the continuance, of his office, a member of the college of Curators." Beside the duties touching the superintendence and administration of the University, "when a chair falls vacant, the curators shall propose to the Department of Instruction in the Arts and Sciences" (in the Batavian statutes, "to the ministry of the Home Department,") "two candidates for the situation, and they shall subjoin to their proposal the reasons which have determined their choice. The definitive nomination shall be made by the King." To hold, annually, two ordinary and as many occasional meetings as circumstances may require. "The curators shall, on their appointment, make, before the King, the following oath: *I swear (I promise) fidelity to the country and to the King. I swear to observe the regulations and enactments concerning academical establishments, in so far as they concern my function of Curator of the University of —, and to co-operate, in so far as in me lies, to its welfare and celebrity.*" Office of curator gratuitous; certain travelling expenses allowed. "To every college of Curators a Secretary is attached, bearing the title of Secretary-inspector, and having a deliberative voice in their meetings. He shall be bound to residence in the town where the University is established, and, when the college of Curators is not assembled, shall watch that the measures touching the high instruction and the regulations of the University are observed, &c." This Secretary was salaried.

We have spoken specially of *Leyden*, but all the schools of Holland owed their celebrity to the same constitution; and the emulation of these different boards contributed greatly to their prosperity. The University of *Franeker*, founded in 1585, had three Curators and a Secretary. That of *Groningen*, founded in 1615, was

governed by a college of *six Curators*, appointed by the States of the province. *Utrecht*, raised from a *Schola Illustris* to a University in 1636, and in endowments second only to *Leyden*, had *five Curators* and a Secretary. For *Harderwick* (we believe) there was a board of *five Curators* and a President. The *Athenæum* of *Amsterdam*, which emulated the Universities of *Leyden* and *Utrecht*, was governed by *two Curators*; and the other *Scholæ Illustrés* were under a similar constitution. On the curatorial system likewise was established the excellence of the *classical schools* of *Holland*; and these, as recently admitted by the most competent authority in Germany, (*Thiersch*,) have been long, with a few individual exceptions in Germany, the best throughout Europe.

But let us consider how the system wrought. We shall speak only of *Leyden*.

It is mainly to John Van der Does, Lord of Noortwyk, a distinguished soldier and statesman, but still more celebrated as a universal scholar, under the learned appellation of Janus Douza, that the school of *Leyden* owes its existence and reputation. As governor of that city, he had baffled the leaguer of *Requesens*; and his ascendancy, which moved the citizens to endure the horrors of the blockade, subsequently influenced them to prefer, to a remission of imposts, the boon of a University. In the constitution of the new seminary it was he who was principally consulted; and his comprehensive erudition, which earned for him the titles of the "*Batavian Varro*," and "*Common Oracle of the University*," but still more his lofty views and unexclusive liberality, enabled him to discharge, for above thirty years, the function of first curator with unbounded influence and unparalleled success. *Gorard Van Hoogeveen*, and *Cornelius de Coning*, were his meritorious colleagues.

Douza's principles were those which ought to regulate the practice of all academical patrons; and they were those of his successors. He knew, that at the rate learning was seen prized by the state in the academy, would it be valued by the nation at large. In his eyes, a University was not merely a mouthpiece of necessary instruction, but at once a pattern of lofty erudition, and a stimulus to its attainment. He knew that professors wrought more even by example and influence than by teaching; that it was theirs to pitch high or low the standard of learning in a country; and that, as it proved arduous or easy to come up to them, they awoko either a restless endeavour after an even loftier

attainment, or lulled into a self-satisfied conceit. And this relation between the professorial body and the nation, held also between the professors themselves. Imperative on all, it was more particularly incumbent on the first curators of a University, to strain after the very highest qualifications; for it was theirs to determine the character which the school should afterwards maintain; and theirs to give a higher tone to the policy of their successors. With these views, Douza proposed to concentrate in Leyden a complement of professors all illustrious for their learning; and if the *most* transcendent erudition could not be procured for the University, with the obligation of teaching, that it should still be secured to it without. For example. *Lipsius*, "the Prince of Latin literature," had retired. Who was to replace him? *Joseph Scaliger*, the most learned man whom the world has ever seen, was then living a dependent in the family of Rochepozay. He, of all men, was if possible to be obtained. The celebrated *Baudius*, and *Tuningius*, professor of civil law, were commissioned to proceed as envoys to France, with authority to tender the appointment, and to acquiesce in any terms that the illustrious scholar might propose. Nor was this enough. Not only did the Curators of the University and the Municipality of Leyden write in the most flattering strain to the "Prince of the literary Senate," urging his acquiescence, but also the States of Holland, and Maurice of Orange. Nay, the States and Stadtholder preferred likewise strong solicitations to the King of France to employ his influence on their behalf with the "Phoenix of Europe;" which the great Henry cordially did. The negotiation succeeded. Leyden was illustrated; the general standard of learned acquirement in the country, and the criterion of professorial competency, were elevated to a lofty pitch; erudition was honoured above riches and power, in the person of her favourite son; nor had the fallen despot of Verona to regret his ancestral dignity, whilst republics, and princes, and kings, were suitors to the "Dictator of the Commonwealth of Letters."—After the death of Scaliger, who never taught, the curators, with a liberality in which they were soon after checked, tried to induce *Julius Pacius* (for whom the Universities of Germany, of France, and, though a heretic, of his native Italy, likewise contended,) to accept a large salary, on condition only of residence in Leyden. But the place of Scaliger was to be filled by the only man who may contest with him the supremacy of learning; and *Salmasius*, who, though a Protes-

tant, had been invited to Padua, but under the obligation of lecturing, preferred the literary leisure of Leyden, with the emoluments and honours which its curators and magistracy lavished on him:—simply, that, as his call declares, he might improve by conversation, and stimulate by example, the learned of the place;” or, in the words of his funeral orator, “ut nominis sui honorem Academiæ huic impertiret, scriptis eandem illustraret, præsentia condecoraret.” And yet the working professors of Leyden, at that time, formed a constellation of great men which no other University could exhibit.*

Such is a sample of the extraordinary efforts (for such sinecures were out of rule) of the first Curators of Leyden, to raise their school to undisputed pre-eminence, and their country to the most learned in Europe. In this attempt they were worthily seconded by their successors, and favoured by the rivalry of the patrons of the other Universities and Scholæ Illustres of the United Provinces. And what was their success? In the Batavian Netherlands, when Leyden was founded, erudition was at a lower ebb than in most other countries; and a generation had hardly passed away when the Dutch scholars, of every profession, were the most numerous and learned in the world. And this not from artificial encouragement and support, in superfluous foundations, affording at once the premium of erudition, and the leisure for its undisturbed pursuit, for of these the Provinces had none; not from the high endowments of academic chairs, for the moderate salaries of the professors were returned (it was calculated) more than twelve times to the community by the resort of foreign students alone; but simply through the admirable organization of all literary patronage, by which merit, and merit alone, was always sure of honour, and of an honoured, if not a lucrative appointment;—a condition without which Colleges are nuisances, and Universities only organized against their end. Leyden has been surpassed by many other Universities, in the emoluments and in the number of her chairs, but has been equalled by none in the average eminence of her professors. Of these, the obscurer names would be luminaries in many other schools; and from the circle of her twelve professors, and in an existence of two hun-

* [I may mention for the glory of England, (or rather of Ireland,) that *Usher*, when deprived of his Archbishopial emoluments, and a mere preacher in Lincoln's Inn, was invited to Leyden on the same honourable conditions. But *Usher* was, virtually, a *Presbyterian*.]

dred years, she can select a more numerous company of a higher erudition than can be found among the public teachers of any other seminary in the world. Far more, indeed, is admitted of Leyden by a learned German, himself an illustrious ornament of a rival University. "Hanc urbem," says Grævius, (who, though a Protestant, was also invited by the Moderators of Padua,)—"hanc urbem præ ceteris nobilitavit, et super omnes extulit illustrissimum et augustissimum illud sapientiæ et omnis doctrinæ sacrarium, maximum orbis muscum, in quo plures viri summi, qui principatum ingenii et eruditionis tenuerunt, florere, quam in cæteris omnibus Europæ Academiis."

That Leyden and the other Dutch Universities do not now retain their former relative superiority, is not owing to any absolute decline in them, or corruption in their system of patronage, but principally, if not entirely, to the fact, that as formerly that system wrought almost exclusively in their behalf, so it has now, for a considerable period, been turned very generally against them. The rise of the German Universities, in fact, necessarily determined a decline in the external prosperity of the Dutch.

The Universities of the *Empire*, indeed, exhibit perhaps the most striking illustration of the exclusive efficacy of our principle. For centuries, these institutions had languished in an obscurity which showed the darker by contrast to the neighbouring splendour of the Batavian schools: when, by the simple application of the same curatorial patronage, with some advantages, and relieved from the religious restrictions which clogged its exercise in Holland, the Protestant Universities of Germany shone out at once with a lustre that throw almost into the shade the seminaries by which they had themselves been previously eclipsed.

The older German Universities, like those of France, the Netherlands, England, and Scotland, were constituted on the Parisian model; consequently, all graduates became, in virtue of their degree, ordinary members of the several faculties, with equal rights in the government of the corporation, and equal privileges and obligations as academical teachers. But though the privilege of lecturing in the University was preserved to the graduates at large, a general dispensation of its compulsory exercise was in Germany, as in other countries, soon rendered possible by the endowment which took place of a certain number

of lectureships on the most important subjects, with salaries arising from ecclesiastical benefices, or other permanent funds. Of these, which were usually twelve, at most twenty, in all, the holders were, of course, bound to gratuitous instruction; for, throughout the European Universities the salary of an academical teacher was always given (as a boon to the public, and more especially to the poor) in lieu of his exigible *pastus*. The devices by which this obligation has been, in various countries, variously (*per fas, per nefas*) eluded, would form a curious history.

From towards the middle of the sixteenth century, no German University was founded without a complement of such salaried teachers, or,—as they began from the commencement of that century, distinctively to be denominated,—*Professors* (Professores conducti); and from this period, these appointments were also generally for life. These professors thus came to constitute the ordinary and permanent members of the faculties to which they belonged; the other graduates soon lost, at least on equal terms, the privilege of academical teaching, and were wholly excluded from the everyday administration of the University and its Faculties.

To the salaried teachers thus established in the Universities,—to them collectively, in colleges, or in faculties, the privilege was generally conceded of choosing their own colleagues; and this in the fond persuasion, as the deed of concession usually bore, that the election would be thus always determined with knowledge, and by the superior merit of the candidate. The princes and free cities, who, in the fourteenth and fifteenth centuries, founded Universities and endowed Professorships, abandoned to the salaried teachers this right either entirely or in part. Leipsic and Tuebingen are examples of the one, Ingoldstadt of the other. In the sixteenth and following centuries, on the contrary, when the custom of endowing every public chair with a salary, and that for life, became more and more universal, no German University was erected in which an unfettered right of election was granted to the professors; and as experience had now proved the pernicious policy of such a concession to the older Universities, it was also from them generally withdrawn. The Senate or the Faculties obtained at most the privilege of *presenting* candidates for appointment. Of this Koenigsberg is an instance. But until the foundation of the University of Halle, in 1694, by the statutes of which, the chairs in the juridical and medical faculties were declared absolutely in the appointment of the Prince, (though

these bodies still ventured to interpose their advice;) the selection and ordinary appointment of professors, under the various forms of *presentation*, *commendation*, *proposal*, or *designation*, was virtually exercised by the professorial bodies. There was, in fact, in the state, no other authority on whom this function peculiarly or responsibly devolved. It was the establishment of the University of Göttingen, exactly a century ago, which necessitated a total and most salutary change of system. "The great Muenchhausen," says an illustrious professor of that seminary, "allowed our University the right of Presentation, of Designation, or of Recommendation, as little as the right of free Election; for he was taught by experience, that although the faculties of Universities may know the individuals best qualified to supply their vacant chairs, that they are seldom or never disposed to propose for appointment the worthiest within their knowledge."

The length to which this article has already run, warns us not to attempt a contrast of the past and present state of the German Universities. On this interesting subject, "*satiù est silere quam parum dicere.*" By Gormans themselves, they are admitted to have been incomparably inferior to the Dutch and Italian Universities, until the foundation of the University of Göttingen. Muenchhausen was for Göttingen and the German Universities, what Douza was for Leyden and the Dutch. But with this difference:—Leyden was the model on which the younger Universities of the Republic were constructed; Göttingen the model on which the older Universities of the Empire were reformed. Both were statesmen and scholars. Both proposed a high ideal for the schools founded under their auspices; and both, as first curators, laboured with paramount influence in realising this ideal for the same long period of thirty-two years. Under their patronage, Leyden and Göttingen took the highest place among the Universities of Europe; and both have only lost their relative supremacy, by the application in other seminaries of the same measures which had at first determined their superiority.

From the mutual relations of the seminaries, states, and people of the Empire, the resort to a Gorman University has in general been always mainly dependent on its comparative excellence; and as the interest of the several states was involved in the prosperity of their several Universities, the improvement of one of these schools necessarily occasioned the improvement of the others. No sooner, therefore, had Göttingen risen to a decided superio-

rity through her system of curatorial patronage, and other subordinate improvements, than the different governments found it necessary to place their seminaries, as far as possible, on an equal footing. The nuisance of professorial recommendation, under which the Universities had so long pined, was generally abated; and the few schools in which it has been tolerated, subsist only through their endowments, and stand as warning monuments of its effect. Compare wealthy Greifswalde with poor Halle. The virtual patronage was in general found best confided to a *small body of curators*; though the peculiar circumstances of the country, and the peculiar organization of its machinery of government, have recently enabled at least one of the German states to concentrate, without a violation of our principles, its academical patronage in a ministry of public instruction. This, however, we cannot now explain. It is universally admitted, that since their rise through the new system of patronage, the Universities of Germany have drawn into their sphere the highest talent of the nation; that the new era in its intellectual life has been wholly determined by them; as from thence have emanated almost all the most remarkable products of German genius, in literature, erudition, philosophy, and science.

The matter of academical patronage has of course been discussed in Germany, where education in general has engrossed greater attention than throughout the world beside; and where, in particular, the merits of every feasible mode of choosing professors have been tried by a varied experience. But in that country the question has been hardly ever mooted. All are at one. *Every* authority supports the policy of concentrating the academical patronage in an *extra-academical body, small, intelligent, and responsible*; and we defy the allegation of a single modern opinion in favour of distributing that patronage among a numerous body of electors,—far less of leaving it, in any circumstances, modification, or degree, under the influence of the professorial college. The same unanimity has also, we have noticed, always prevailed in Holland. As a specimen of the state of opinion in Germany on this decided point, we shall cite only three witnesses, all professors, all illustrious authors, and all of the very highest authority, in a question of learned education or of academical usage. These are *Michaëlis*, *Meiners*, and *Schleiermacher*.

MICHAËLIS.—“It is inexpedient to allow the choice of academical teachers

to the Professors themselves, be it either to the whole concilium or to the several faculties; and those Universities which exercise this right, pay the penalty of the privilege. A choice of this description is always ill made by a numerous body, and a single intelligent judge is better than a multitude of electors. - - - In an election by professors, it is also to be feared that partiality, nepotism, complaisance to a colleague in expectation of a return, would be all-powerful; and were it only a patriotic preference of natives to strangers, still would the election be perverted. There is, moreover, a painful circumstance on which I am loath to touch. It is not impossible that the most intelligent judge among the professors, one in the enjoyment of distinguished influence and reputation, may, in the appointment of a colleague, look that this reputation and influence be not eclipsed, and consequently, to the exclusion of all higher talent, confine his choice to such inferior qualifications as he can regard without dread of rivalry. Professors may, it is true, be profitably consulted; but no reliance should be placed on the advice of those who have any counter interest to the new professor. - -

- - The direst evil in the choice of professors, and the certain prelude to the utter degradation of a University, is nepotism; that is, if professors, whether directly through election, or indirectly through recommendation and advice, should succeed in obtaining academical appointments for sons, sons-in-law, &c., of inferior learning. The man who in this manner becomes extraordinary professor will, without merit, rise also to the higher office; and the job which is tolerated on one occasion, must, from collegial friendship and even equitable reciprocity, be practised on others." (*Raisonnement ueber die protestantischen Universitaeten in Deutschland*, (1770) ii. p. 412.)

MEINERS.—"It should be no matter of regret, that Faculties have now lost the privilege of electing their members, or of recommending them for appointment. Certain as it is, that each faculty is best competent to determine what qualifications are most wanted for its vacant chairs, and who are the persons possessing these qualifications in the highest eminence; certain also is it, that in very many cases the Faculties would neither elect nor recommend the individual deserving of preference;—that is, in all cases where they might apprehend that the worthiest would prejudice the interests, or throw into the shade the reputation, of themselves or friends. - - - Let academical patrons be cautious as possible, and let them consult whom they may in the choice of public teachers, it cannot but happen that they should commit occasional mistakes. And when such occur, then it is that we are sure to hear—"This could not have happened, had the University or Faculty been consulted." Yet far worse and far more frequent errors would occur, did the faculties possess the right of free election, or did the higher authorities only choose out of a list presented by the professors. - - -

"The actual choice and confirmation of public teachers is now, in most Universities, in the hands of the Prince, and of the Curators appointed by him; in very few is it exercised by the Universities themselves, or by their several faculties and functionaries. The Universities in which teachers are chosen and confirmed by the Prince, or by the curators nominated by him, are distinguished among themselves by this difference;—that in some, the whole professorial body, or the several faculties, have either the right or the

permission to propose, or at least recommend, candidates for the vacant places; and that, in others, they have not. The questions thus arise:—Is it better that the Universities themselves, or those in authority over them, should elect the professors? Is it better that the University or academical bodies should or should not have the right or permission to propose or recommend for appointment?

“It does not admit of doubt, that the choice of professors by extra-academical governors, is preferable to their election by the senatus or faculties. Curators, however learned they may be, still cannot be so familiar with every department of erudition, as to be able, on every vacancy, to determine, from their own knowledge, what individuals ought to be taken into consideration, and who of these is best deserving of preference. To this the most learned professor would be equally incompetent as the academical curators. It is not, however, difficult for well-disposed and enlightened curators to obtain the information which they themselves cannot possibly possess. They reside, in general, either in great cities, or, at least, in towns inhabited by men of learning, intimately acquainted with every branch of literature. They likewise in general personally know, in the Universities over which they preside, individuals of approved erudition, who can either afford advice themselves, or obtain it from others with whom they are acquainted. In either way, it is easy to ascertain both the number and the relative qualifications of those who would accept the office. This must be admitted; nor can it be denied, that curators will in almost every instance elect those recommended to them as the worthiest, by the best informed and most impartial advisers. Curators have no other, at least no stronger interest, than the maintenance and increase of the prosperity of the University intrusted to their care. This interest induces them, in the academical appointments, rigidly to scrutinize the qualifications of candidates, and to accord the preference only to the most deserving. The individuals out of whom they choose are not of their connexions, and seldom even their personal acquaintances. There is thus rarely any ground of partiality or disfavour. If curators elect according to merit, they enjoy, beside the inestimable approbation of a good conscience, the exclusive honour of their choice. Do they allow themselves to be influenced by unsifted recommendations, to choose another than the worthiest,—they expose themselves, by their neglect of duty, to public and private reprobation.

“Academical senates and faculties possessing the privilege of self-election, have at least this advantage over Curators of Universities, that they are able, from their own knowledge, to appreciate the merit of candidates. But, on the other hand, they in this are inferior to curators, that we can rarely allow them credit for the will to elect him whom they are themselves conscious is best entitled to the place. The worthiest are either opponents or rivals of the electors themselves, or of their friends. The electors, or their friends, have relations or favourites for whom they are desirous to provide. In most cases, likewise, the very interest of the electors excludes the most deserving, and prescribes the choice of an inferior candidate. Impartial elections can only take place in academical senates and faculties, when a chair is to be filled for which there is no competition, and the prosperity of which is for the direct and imme-

mediate advantage of the electors at large. It will be granted that the case occurs but seldom. As long, therefore, as we must admit that academical senates and faculties are more frequently partial than curators of Universities are ill-informed, so long must we maintain, that professors should be elected by a superior authority, and not by the University itself. This, history and experience have already for centuries determined.

"Proposals and recommendations of candidates by senates and faculties, are a minor evil to actual election; but still an evil which should be abolished or avoided. The same causes which determine the election of inferior merit, must operate against the proposal and recommendation of superior. Where it is the custom that the senate or faculty proposes a certain number of candidates, out of which the higher authorities make choice, there arises, if not an open nepotism, at least a provincial spirit of preference, and a secret conspiracy against foreigners, pernicious to a University. If the higher authorities, therefore, confine their choice to those thus recommended, they will always find that the vacant chairs are not provided with the most eminent professors. On the other hand, if they disregard their recommendation, they afford the academical bodies cause of umbrage, and render them the sworn enemies of the professor actually appointed; complaints are raised of broken privileges; and he who is forced on them through such a breach, becomes the object of odium or persecution. It is, therefore, highly advisable, that the founder, and those in authority over Universities, should remain unfettered in the choice of professors; and that in the exercise of this function, they should obtain the advice of those, within and without their Universities, who will afford them the most impartial and enlightened counsel." (*Verwaltung deutscher Universitäten*, (1801), i. p. 124, ii. p. 35.)

SCHLEIERMACHER.—"The University itself must certainly best know its want, when a vacancy occurs, or the opportunity offers of extending the sphere of its instruction; and as we are bound to presume in its members a knowledge of all that appears of any scientific importance in the country, they must likewise know from whence to obtain wherewithal to supply this want. But, alas! no one would on that account be inclined to accord to a University the choice of its teachers. Universities are, one and all, so infamous for a spirit of petty intrigue, that were this privilege once conceded, what rational being is there who, from their devotion to party, from the passions excited in their literary feuds, and from their personal connexions, could not anticipate their pernicious consequences?" (*Gedanken ueber Universitäten in deutschem Sinn*, (1808), p. 97.)

Having thus generalized the principles which govern a well-organized system of academic patronage, and historically shown that these principles have been actually applied in *all* the most distinguished Universities, we shall now conclude our discussion by considering the modes of appointing professors in use in Scotland.

To say nothing of the special patronage of a few individual chairs, the merits of which we cannot at present pause to consider, the general systems of academical patronage here preva-

lont, are three; the trust being deposited in the hands of a *Municipal Magistracy*,—of the *Professorial body* itself,—or of the *Crown*.

MUNICIPAL PATRONAGE.—The *first* of these systems, though not unknown in one of the other Universities, is preponderant only in that of Edinburgh, where the far greater number of professors are elected immediately by the suffrages of the thirty-three members of the Town Council.

This system is generally and justly admitted to be greatly preferable to the other two. An admission, however, of the kind, proves aught rather than the absolute excellence of the method. It is melancholy indeed that such a system should be tolerated in our country; still more melancholy that it must be lauded as the best we have. The utmost that can be said in its favour is, that compared with the other two, it is of itself less disposed to evil, and more capable of being inclined to good.

A body like the Edinburgh Town Council, *as it was*, fulfils none of the conditions of a well-organized board of academical patrons. From their education and rank in society, they were, on the average, wholly destitute of that information and intelligence which such patrons ought to possess; they were a collection of individuals,—numerous,—transitory,—obscure; and the function itself was an appendage altogether accidental to their office.

Such a body of patrons was wholly incapable of an active exercise of their trust. Their unintelligence, numbers, and fluctuating association, prevented them from anticipating and following out any uniform and systematic measures. No general principle determined among them a unity of will. They could not attempt an extensive survey for a discovery of the highest qualifications; nor make a tender of the appointment to those who might accept what they would not solicit. Their sphere of choice was thus limited to actual candidates; and the probabilities of success again always limited candidates to those whose merits were supported or supplied by local and adventitious circumstances. Even in the narrow circle of candidates, the choice of the civic patrons was always passive; and its character for good or ill, wholly dependent on the nature of some external determination. The judgment of a proper body of patrons should be higher than that of the community at large; it should guide, not merely follow, public opinion. This, however, was not to be expected from a body of burgesses; in fact, it has been the only merit of the Town Coun-

cil of Edinburgh, either claimed or accorded, that public opinion was not without a certain weight in their decision. But public opinion is not unfrequently at fault; it favours the popular and superficial, not the learned and profound. The qualifications of a professor are frequently wholly beyond its cognisance; and still more frequently the qualifications of candidates are unknown. Public opinion was thus either not expressed in favour of any candidate, or it was divided; and the patrons solely abandoned to accident, or the impulsion of some less salutary influence,—an influence frequently found omnipotent, even against public opinion itself.

The Town Council of Edinburgh was, in fact, peculiarly exposed to have its patronage corrupted through a variety of channels; and the history of the University shows, that the highest merit, and the public opinion of that merit most emphatically pronounced, have never, in a single instance, prevailed, when a perverse influence has been adequately brought to bear on the electors. Nor could it possibly be otherwise. A body of electors more completely relieved of responsibility, and the consciousness of responsibility, could scarcely be imagined. We had here a body, itself the creature, and consequently the pliant instrument, of favour, intrigue, and corruption. The members of this body were men, in general, wholly unable to represent to themselves the high importance of their decision, or to be actuated by any refined conception of their duty; nor could public reprobation be felt at all, when the responsibility was so pulverized among a passing multitude of nameless individuals. Such a body was, of all others, liable to be led astray from their duty by those who had an interest in perverting their choice. "It is remarkable," says Dr Chalmers, "that some of the chief deviations by Magistrates and Councils in the exercise of this trust, have been brought about by the influence of leading men in the Church or in the University." This influence, which was long as systematically as perniciously exerted, operated equally to the corruption of the Church and of the University; and the last, worst form of academical patronage, that by the professorial body itself, was thus covertly at work, without even the trifling checks which accompanied its open exercise. Itself the breath of party, the Town Council hardly pretended to impartiality when politics disturbed its choice; and the most transcendent claims were of no avail against the merits of a municipal relationship. A large proportion of the electors were

necessarily in dependent relations; and some hardly above the condition of paupers. They were thus wholly incapacitated from resisting the various sinister influences which assailed their integrity; and even direct bribery, which is known to have been sometimes tried, was probably not always unsuccessful. It was thus, only when left to themselves, and to the guidance of public opinion, that the civic patrons could be trusted;—only when the powers which commanded their voices had no sufficient interest in warping their decision. The fact, that they not only tolerated, but expected, the personal solicitations of candidates and their friends, proves also, of itself, that they had no true conception of their office;—that they thought of granting a favour, not merely of performing a duty. Patrons who exercise their power only as a trust, will spurn all canvassing as an insult, if candidates do not feel it as a disgrace. Judges were once courted in this and other countries in a similar manner. We look back on such a practice as on a marvel of political barbarism; and it will not, we trust, be long until we recollect with equal wonder the abomination of solicited trustees.

That municipal magistrates could possibly exercise, of themselves, the function of academic patrons, seems in no other country to have been imagined; and even in Edinburgh, the right of choice was originally limited by conditions which the Town Council have only latterly evaded. Their election formerly expressed only the issue of a public concurrence of candidates, and disputation in the Latin tongue; and the decision, too, we believe, was only valid when sanctioned by the approval of the Presbytery.* We recollect only two foreign Universities in which the municipality were patrons,—Louvain and Altdorf. In the former, this right, which extended only to certain chairs, was controlled by the faculties, whose advice was to be always previously taken; and the decline of that great and wealthy seminary was mainly determined by its vicious patronage, both as vested in the University and in the Town. Altdorf, on the other hand, founded and maintained by the free city of Nuremberg, was about the poorest University in Germany, and long one of the most eminent. Its whole endowments never rose above L.800 a-year; and till the period of its declension, the professors of Altdorf make at least as distinguished

* [To the *City Clergy* the Council *formally sold*, in fact, the right of jointly voting with themselves in the election of Professors. Principal Lee showed me the document; but the right has somehow or other been lost sight of.]

a figure in the history of philosophy, as those of all the eight Universities of the British Empire together. On looking closely into its constitution, the anomaly is at once solved. The patrician Senate of Nuremberg were not certainly less qualified for academical patrons than the Town Council of Edinburgh; but they were too intelligent and patriotic to attempt the exercise of such a function. The nomination of professors, though formally ratified by the senate, was virtually made by a board of *four curators*; and what is worthy of remark, so long as curatorial patronage was a singularity in Germany, Altdorf maintained its relative pre-eminence,—losing it only when a similar mean was adopted in the more favoured Universities of the Empire.

These observations are, in their whole extent, applicable only to the *old Town Council*; but it is manifest that all the principal circumstances which incapacitated that body, under its former constitution, for a competent exercise of academic patronage, continue still to operate under its present; and if some minor objections are removed, others, perhaps of even greater moment, have arisen. On these, however, we cannot at present touch. Indeed, it is only in a country far behind in all that regards the theory and practice of education, that the notion of intrusting a body like a municipal magistracy with such a trust, would not be treated with derision; and we have so high an opinion of the intelligence and good intentions of the present Town Council, that we even confidently expect them to take the lead in depositing in proper hands that important part of their public trust, which they are unable adequately to discharge themselves. [But alas!]*

Their continuance as patrons would, in fact, seal the downfall of the University of Edinburgh; unless, what is now impossible, systems of patronage still more vicious should continue to keep down the other Universities of Scotland to their former level. All of these are superior to Edinburgh in endowments; and if the one decisive superiority which Edinburgh has hitherto enjoyed over them, in the comparative excellence of her patronage, be reversed in their favour, the result is manifest.

PROFESSORIAL PATRONAGE.—From the best of our Scottish systems of academical patronage, we now pass to the worst; and

* [1853. A new and final corruption has indeed recently emerged. The electors now vote by sect; and any ignorant religious party may calculate on the suffrages of its adherents in the Council, in favour of any candidate whom it may propose.]

public opinion is, even in this country, too unanimous in condemnation, to make it necessary to dwell upon its vices. We mean that of *self-patronage*.

In the unqualified form in which it has so long prevailed in Scotland, it was tried, in the darkness of the middle ages, in a very few of the continental Universities; and in these the experiment was brief. In an extremely modified shape, and under circumstances which greatly counteracted its evils, it was tolerated for a considerable period in the German Universities; experience, however, proved its inexpediency under every mitigation, and it has been long in that country, as we have shown, absolutely and universally condemned. [See the authorities above, p. 382—385.]

As established in Scotland, this system violates, or rather reverses, almost every condition by which the constitution of a board of patrons ought to be regulated.—In the *first* place, by conjoining in the same persons the right of appointment and the right of possession, it tends to confound patronage with property, and thus to deaden in the trustee the consciousness of his character; in fact, to foster in him the feeling, that, in the exercise of his function, he is not discharging an imperative duty, but doing arbitrarily what he chooses “with his own.”—In the *second* place, as it disposes the patron to forget that he is a trustee, so it also primes him with every incentive to act as a proprietor. Natural affection to children and kindred;* personal friendship and enmity; party, (and was there ever a University without this curse?); jealousy of superior intelligence and learning, operating the stronger the lower the University is degraded; the fear of an unaccommodating integrity; and finally, the acquiescence even of opposite parties in a job, with the view of a reciprocity;—these and other motives effectually co-operate to make the professorial patron abuse his public duty to the furtherance of his private ends. The single motive for bestowing on professors the power of nominating their colleagues, was the silly persuasion that they were the per-

* “Hence the hereditary successions in colleges which are thus patronised, —the firm and infrangible compacts, which sometimes last for generations, cemented as they are by the affinities of blood and relationship,—the decaying lustre of chairs once occupied by men of highest celebrity and talent, but the very ascendancy of whose influence when living, or of whose names after they were dead, effected the transmission of their offices to a list of descendants.”—*Dr Chalmers*.

sons at once best able to appreciate ability, and the most interested in obtaining it. If this were true,—if it were not the reverse of truth, we should surely find our professorial patrons in Scotland, like the curators of foreign Universities, looking anxiously around, on every vacancy, for the individual of highest eminence, and making every exertion to induce his acceptance of the chair. But has it been heard that this primary act of a patron's duty was ever yet performed by a college of professorial patrons? In the nature of things it could hardly be. For why? This would be an overt admission, that they were mere trustees performing a duty, not proprietors conferring a favour. Were the highest qualifications once recognised as the sole rule; why not make its application universal? But then, the standard of professorial competence would be inconveniently raised; the public would expect that the reputation of the University should not be allowed to fall; and the chairs could therefore no longer be dealt about as suited the private interest of the patrons. The private interest of the patrons, therefore, determined an opposite policy. The standard of professorial competence must be kept down—it seldom needed to be lowered—to the average level of their relatives and partisans. Not only must no invitation be given to men of reputation, they must be disgusted from appearing as candidates. The value of the chairs, as places of honour, must be reduced; that, as places of emolument, they might not, and that in an unlearned country, be beyond the reach of ordinary men. Instead of receiving an unsolicited call to take his seat among the members of an illustrious body, the man of highest reputation, to obtain the *chance* even of a chair, must condescend to beg the lowered office as a favour, from a crowd of undistinguished individuals, to obtain whose voices was no credit, and not to obtain them would still be felt as a disgrace; and submit to the humiliation of being fellow-candidate of all and sundry, whom the humble vanity of standing for a chair, or personal and party interest with the electors, called—and with probable success—into the field. To be left to divide the cake in the shade, has been the aim of all professorial patronage. We do not assert, that under this system no men of distinguished merit have illustrated our Universities;—far from it; but we assert that of all others it tends to make celebrity the exception, obscurity the rule. And of the small number of great names to which the professorial patronage can lay claim, some conquered their appointments by other reasons than their merits, and more took

their patrons and the world by surprise in their subsequent reputation. We know something of the history of foreign Universities, and something, at least by negation, of the history of our own. And this we affirm, that if a premium were given to the University which could exhibit among its professors the largest proportion of least distinguished names, the Scottish Universities, where self-election is prevalent, would have it only to contend for among themselves.

We may here anticipate an objection we have often heard, that, however bad in theory, the patronage of the Scottish Universities is found, in practice, to work well; these seminaries fully accomplishing their end, as shown by the flourishing state of learning in the country.

Assuming, with the objector, the effect produced, as a test of the instrument producing,* this patronage must on the contrary be granted to have wrought almost worse in practice, than reasoning could have led us to anticipate; *erudition, in every higher acceptation, being in Scotland at a lower pass than in any other country almost of Europe.*—Without, we think, any overweening patriotism, we may assert, that no people in modern times has evinced more natural ability than our own; and in all the departments of knowledge where intellectual vigour, rather than extensive erudition, may command success, the Scotch are at least not inferior to any other nation in the world. “*Animi illis,*” says Barelay, “*in quæcunque studia inclinant, mirifico successu inclyti; ut nullus major patientia castrorum, vel audacia pugnae, ot Musæ nunquam delicatius habeant, quam cum incederunt in Scotos.*” Nor, assuredly, have they shown an incapacity for the highest scholarship, when placed in circumstances disposing them to its cultivation. On the contrary, no other people have achieved so much in this department in proportion to their means. From the petty portion of her scanty population, whose education was not stunted in her native seminaries, Scotland can show at least some three or four more consummate masters of a Latin style, and that both in prose and verse, than all the other nations of the British Empire can exhibit, with ten times her population, and so many boasted schools. Nature gives ability, education gives learning;

* Though the *principal*, we do not, of course, hold that a good academical patronage is the *only* condition of high learning in a country. An exposition of all the concurrent causes of this result would form the subject of an important discussion.

and that a people of such peculiar aptitude for every study, should remain behind all others in those departments and degrees of erudition, for the special cultivation of which Universities were established, proves, by the most appropriate of evidence, that those of Scotland are, in their present state, utterly unqualified for the higher purposes of their existence. Of these correlative facts, we shall supply *two* only, but these, significant illustrations. [On these compare also Education No. ii. pp. 348—354.]

The *first* It will be admitted, that a very trifling fraction of the cultivated population of any country can receive its education and literary impulsion in foreign lands; consequently, if the seminaries of Scotland were not incomparably inferior, as instruments of *erudition*, that the immense majority of Scottish scholars must have owed their education exclusively to Scottish schools.

Now, on this standard, what is the case? Of Scottish scholars, all of the highest eminence, and far more than nine-tenths of those worthy of the name of scholar at all, have been either educated in foreign seminaries, or their tastes, and the direction of their studies, determined in the society of foreign learned men.

Nor is the *second* illustration less remarkable. It will be admitted, that the erudition of a national (we do not mean merely *established*) church, affords not only a fair, but the most favourable criterion of the erudition of a nation. For, in the *first place*; Theology, comprehending (or rather being itself contained in) a wider sphere of scholarship than any other learned profession, and its successful cultivation necessarily proportioned to the degree in which that scholarship is applied; it follows, that the Theology of a country can never transcend, and will rarely fall beneath, the level of its erudition. In the *second*; the clergy form every where the most numerous body of literary men; consequently, more than any other, express the general diffusion of literary accomplishment throughout a people. In the *third*; the clergy or those educated for the church, constitute the class from which tutors, schoolmasters, and professors, are principally taken. Their proficiency and example thus react most powerfully and extensively, either to raise and keep up learning, or to prevent its rising among all orders and professions. In the *fourth*; as almost exclusively bred in the schools and Universities of their country, they reflect more fairly than the rest of the educated ranks, the excellences and defects of the native seminaries. And in the *fifth*; as their course of academical study is considerably longer than

that of the other learned professions, they must be viewed as oven a highly favourable specimen of what their native seminaries can accomplish.

Now, in Scotland, on this criterion, what is the result? Simply this: Though perhaps the country in Europe where religious interests have always maintained the strongest hold, *Scotland, in the history of European Theology, has, for nearly two centuries, no name, no place.* For nearly two centuries, the home-bred clergy of Scotland, established and dissenting, among their countless publications of a religious character, some displaying great and various talent, have, with two [*one**], not illustrious exceptions, contributed not a single work to the European stock of theological erudition; and for an equal period, they have not produced a single scholar on a level with a fifth-rate philologer of most other countries. In these respects, many a dorf in Germany or Holland has achieved far more than the broad realm of Scotland.† A comparison of the Scotch and English Churches affords a curious illustration in point. In the latter, the clergy have a tolerable classical training, but for ages have enjoyed, we may say, no theological education at all. In the former, the clergy must accomplish the longest course of theological study prescribed in any country, but with the worst and shortest classical preparation. Yet in theological erudition, what a contrast do the two Churches exhibit! And this, simply because a learned scholar can easily slide into a learned divine, without a special theological education; whereas no theological education can make a man a competent divine, who is not a learned scholar;—*theology being, in a human*

* [Even the *one*, to which the two exceptions are here reduced, is, I am sorry to find, hardly valid. For "The Harmony of the Gospels" by *Dr Macknight*, (and to him I alluded,) was, indeed, translated into Latin and printed at Bremen in 1777; but the author, I see, had studied in the great classical school of Leyden.—I have already (p. 351) alluded to the deleterious effect of the discouragement, by the General Assembly of the Church of Scotland, to the resort of Scottish Students in Divinity even to foreign Calvinist Universities. (From *Addenda* to former edition.)]

† [The unhappy decline of theological learning in Scotland has, since this article was written, resulted in a memorable issue,—in what is vulgarly called "the Disruption": that is, the secession, after a ten years' agitation, of one part of the established clergy on a *theological mistake*; while that mistake was not exposed by the other, adhering to the National Church. A slight acquaintance with the writings of the older divines,—of the authorities in this and other Protestant communions, would have obviated the calamitous error.]

sense, only a philology and history, applied by philosophy.—But again. In other countries, the clergy, or those educated for the church, as a class, take the highest place in the higher departments of learning. Scotland, on the contrary, is singular in this, that all her scholars of any eminence, have, for almost two centuries, been found exclusively among the laity, and these, as we have noticed, rarely educated in her native institutions.

PATRONAGE BY THE CROWN.—The third and last mode of appointing to academical offices in Scotland, is *nomination by the Crown*.—There being no special department, in our Government, for public instruction, this patronage has fallen to the Secretary of State for the Home Department. The defects of this mode of appointment are sufficiently obvious. Here a great deal certainly depends on the intelligence and liberality of the individual Minister, to counteract the natural defects of the system. But, even under the best and most impartial Minister, it can accomplish its end only in a very precarious and unsatisfactory manner. The Minister is transitory; the choice of professors is a function wholly different in kind from the ordinary duties of his department; is not of very frequent recurrence; and concerns a distant quarter of the empire, where the Universities are situated, and the candidates generally found. The Minister cannot, therefore, be presumed to think of specially qualifying himself for this contingent fraction of his duty. He must rely on the information of others. But can he obtain impartial information, or be expected to take the trouble necessary in seeking it? On the other hand, he will be besieged by the solicitations of candidates and their supporters. Testimonials, collected by the applicant himself among his friends, and strong in proportion to the partialities of the testifier, and the lowness of the criterion by which he judges, will be showered in, and backed by political and personal recommendations. If he trust to such information, he limits his patronage to those who apply for the appointment; and as all certificates of competence are in general equally transcendent, he will naturally allow inferior considerations to incline his preference among candidates all ostensibly the very best.

To lift this patronage out of the sphere of political partiality, and to secure precise and accurate information from an unbiassed, intelligent, and responsible authority, is what every patriotic Minister of the Crown would be desirous to effect. But this can be best accomplished by organizing a board of Curators (the name

is nothing) for each University, on the principles of patronage we have explained; whose province would be to discover, to compare, to choose, to recommend, and to specify the grounds of their preference, to the Minister, with whom the definitive nomination would remain,—a nomination, however, which could be only formal, if the curators conscientiously fulfilled the duties of their trust. How beneficially these authorities would reciprocally act as checks and counter checks, stimuli and counter stimuli, is apparant. By this arrangement, the Crown would exchange an absolute for a modified patronage in those chairs now in its presentation; but this modified patronage would be extended over all others. The definitive nomination would certainly be no longer of value as a petty mean of ministerial influence; but the dignity of the Crown would thus be far better consulted in making it the supreme and general guardian of the good of all the Universities. Nor would the system of curatorial boards be superseded, were a separate department of public instruction to be established in the administration of the State. On the contrary, in most countries where this organization of government prevails, the University curators form one of the most useful parts of its machinery; and nothing contributes more to perfect the curatorial system itself, than the consciousness of the curator that his recommendation is always strictly scrutinized by an intelligent and well-informed Ministry, before being carried into effect.

In the present article, we have limited our discussion to the general conditions of a good system of academic patronage. We do not, therefore, now touch on the difficult and important question—*How is a board of academic patrons and governors to be best constituted under the particular circumstances of this country?**

* [As in part supplying an answer to this important question, it may not be improper here to extract that portion of the Evidence given by me in the course of the same year, when examined by "The Commissioners appointed to inquire into the state of Municipal Corporations in Scotland." In Appendix III. (A) will be found likewise a relative extract from the General Report of these Commissioners, presented to both Houses of Parliament.

"The best mode of organizing a board of Curatorial Patrons for the University of Edinburgh, appears to me the only point of any considerable difficulty; and this because we have here not to deal merely with principles in the abstract, but to determine what, under the special circumstances of the case, is the highest point of perfection which we can practically realize.

"But before stating what appears to me the most expedient plan of constituting such a board, I would premise that a board of curators, almost any

how elected, and of only ordinary intelligence and probity, would, if small, and not of a transitory continuance in office, be always greatly preferable as academical governors and patrons to the passing mob of civic councillors, either under the past or present constitution of the city; because such a body could hardly fail of being more competent to their office, from greater average understanding, from their not being disabled for active and harmonious measures towards obtaining University teachers of the very highest qualifications, and from their standing prominently forward to public view, and consequently acting under a powerful feeling of responsibility in the exercise of their trust. But merely to improve on so vicious a system of patronage as the present would be doing very little; and, though a small board of curators could not *but* be preferable to the town-council, still the all-important question remains,—*How is such a board, of the highest possible excellence, to be most securely obtained?*

"In attempting a feasible solution of this problem, we must accommodate our plan to existing circumstances, and construct our building with the materials that lie around us. These are certainly not the best possible; but they seem to me not inadequate to the end in view; and the difficulty of obtaining better, if such could actually be obtained, would probably far more than overbalance the superior advantages they might otherwise promise. Taking, therefore, the *public bodies*, such as we find them in this city, and employing the principal of these as the means of organizing a board of academical *Curators*, the following appears to me the plan which would probably accomplish, to the highest practical perfection, the end in view, *i.e.* the election of Curators competent to their duty, and actuated by the strongest motives to its fulfilment.

"Let the Curators be elected for a fixed term of years, say seven; and there may either be a general septennial election, or each Curator may continue in office the full term, from the actual date of his appointment. Curators to be re-eligible; it being also understood that they *ought to be re-elected*, if their conduct merit approbation.

"When a vacancy occurs, a writ to be issued from —, requiring each of the six following bodies to elect, and their president to return to —, as elected by a majority of at least two-thirds, a *Delegate*, qualified (as the writ should bear) by his intelligence, probity, and general liberality, to concur in electing a Curator or Curators of the University. These bodies are, 1. The Faculty of Advocates; 2. The Society of Writers to the Signet; 3. The Royal College of Physicians; 4. The Royal College of Surgeons; 5. The Presbytery of Edinburgh (or, perhaps, under certain regulations, the Synod or General Assembly); 6. The Town Council. The Delegate to be either a member of the constituent body or not, but never its ordinary presiding functionary. In the case of the Town Council, the delegate ought certainly not to be a member of that body, and perhaps it would be better if the same rule were even extended to the others. On his appointment the Delegate to make a solemn declaration, before a meeting of his constituents,—“that he has not canvassed for the appointment himself, or sanctioned any canvassing by others on his behalf; that he feels no sense of obligation to vote for any individual; and that, in the election, he will be solely biassed by his honest conviction that the object of his choice is the person best qualified to discharge with

intelligence, and without personal, political, or religious partiality, the functions of Academic Curator." Should any of the bodies fail in returning a Delegate by the requisite majority, the complement of six to be supplied by allowing one or other of the remaining bodies, in what order, and under what regulations may be deemed expedient, to elect a second Delegate. The Delegate to be ineligible to an academical chair by the Curators whom he has concurred in electing, and perhaps, likewise his sons, sons-in-law, and brothers, or only under certain restrictions, as, for instance, only by a unanimous choice of the Curators.

"The Delegates to report their elections of Curators to the relative Minister of State, specifying the votes of each Delegate for each Curator; and each Delegate also to report his own vote to his constituents. If the choice be unanimous, the Minister bound to confirm the nomination; but otherwise, it shall be in his power to order a new election of Delegates and Curator: but should the same Curator be again returned, his appointment to be hereby determined.

"Ineligible to the curatorial office,—peers, the lords president and justice-clerk, professors, clergymen, and practising medical men; and not more than two Curators at most to be elected from the judges of the supreme court.

"Before entering on their function, an instruction for their conduct in office, ratified by his Majesty and Parliament, to be accepted and signed by the Curators. This instruction should, *inter alia*, anxiously prescribe that they are not (as has in this country hitherto been the case) merely to bestow the vacant chairs on one of those who may happen to come forward as candidates; but that they are to look carefully around for the person of the highest competence, and make to him a tender of the appointment, even at the risk of it being declined. They should also make an articulated oath to the upright discharge of their duty, and this in the most impressive form, as before the *whole* Court of Session, specially commissioned for the purpose by the King.

"As formerly stated, the Curators, on each designation of professor, to make a detailed report of their choice and its grounds to the Minister, stating whether it were unanimous or not, and the names of the majority and minority. If unanimous, their designation to necessitate the confirmation; but if not, then the Minister may remit the matter for reconsideration to the Curators, and even ultimately suspend his ratification. On this last event, (which is not of probable occurrence,) the majority of the Curators must, of course, resign; but if the new Curators, hereupon appointed, (whether the same individuals be elected or not,) repeat the former designation, in that case, their choice to be held as final, and the royal confirmation not to be refused.

"The reasons of the different parts of this plan are sufficiently obvious.—The primary elective bodies, though none of them the best possible, are still sufficiently numerous, and sufficiently different, to neutralise any partial interests with which they might severally be infected, and each will, consequently, be induced to act only for the benefit of the public, in which they themselves always participate.—Then, as the Delegates are to be chosen by a large majority, no one is likely to be proposed, far less to be elected, who

does not enjoy the general confidence of the electors, apart from all considerations of party.—The writ, and its tenor, takes the election of Delegate out of the ordinary routine, gives it a certain solemnity, and puts the electors on their honour; while this is still more efficiently done with the Delegates by the public declaration they must make on accepting their commission.—The report of the Delegates to the Minister and their constituents is useful, by impressing more strongly on them the importance of their choice; by bringing their individual conduct before the world, and thus enhancing their consciousness of responsibility.—The signature of the instruction, and the solemn oath by the Curators, will tend to keep them alive, and, what is even of greater consequence, to keep the public alive to the nature and high value of their duties. If the public know what they have a right to expect, then trustees will be sure to feel as a necessity what they ought to perform.—But every precaution to raise an academical patronage out of the sphere of private and party influence is the more anxiously to be taken, as in no other country of Europe, both from the relations of our Universities, and the constitution of our government, has merit hitherto obtained so little weight in the choice of professors,—in no other country is the national conscience in regard to the distribution of public patronage so blunted. To this end the other regulations likewise concur;—the checks and counter checks of the Minister, Curators, and primary bodies on each other; and the necessity imposed on the Curators of vindicating their choice by an exposition of its grounds. The reason of the exclusion of the presidents of the primary bodies from the office of Delegate is to prevent the Delegation from the risk of falling into routine, or being considered as other than a special and most important trust. The exclusion of peers, the president, and justice-clerk, &c., from the office of Curator, is to prevent that honour from being made, or appearing to be made, a sequel to any personal or official rank,—from being regarded as other than the highest and most unequivocal mark of public confidence in the high character and peculiar capacity of the individual elected to the situation.

“Without attempting an ideal perfection by this plan, I am confident a board of academical Curators would easily and surely be obtained, who would perform all that could reasonably be expected, and determine a golden era in the fortunes of our Scottish Universities.”

On reading over the preceding, the scheme now strikes me as too complex, and it might, I think, be simplified, without essential detriment, by several omissions. In principle, I am however persuaded, it is right, and favour strongly the plan of *indirect or mediate election*; for it is of great importance, that Curators should be chosen by the joint intelligence of a small body, nor feel themselves the nominees, of any particular interest or class. However, as indirect election is not generally understood in this country, if the elective bodies are precluded from choosing among their own members, I have no doubt that a fair board of academical appointment and control would be obtained; nay, that one constituted in the simple mode recommended by the Burgh Commissioners would be a marvellous improvement on the present reign of ignorance, favour, passion and caprice.

How greatly the University of Edinburgh is in want of a good superintendence, (to say nothing of a good patronage,) is shown by the actual state of

its *Examinations* and *Degrees*. The *Senatus Academicus*, with many individual exceptions, is, as a body, totally incompetent to self-regulation; and even the personal interest of a majority of its numerous members is now opposed to the general interests of learning, of the public, and of the University, as an organ of education.

This also is too manifestly shown in the misappropriation of the funds left by *General Reid*, "to make additions to the *Library*, or otherwise to promote the *general* interest and advantage of the University, in such way as the Principal and Professors shall in their discretion think most fit and proper." This bequest, through the preponderance of a special interest, which has grown into command of the *Senatus* since the will was made, the holders of the *new* chairs acting also as trustees, as if so to act they were legally entitled,—in opposition to the manifest intention of the testator,—and in opposition to the most significant warnings both from within and from without the body; has been diverted, not only to *special* purposes, but even to the personal advantage of a complement of the trustees:—the small majority refusing a preliminary inquiry, and not even accepting the information offered by the Principal and others, in regard to the *general wants* of the University; overlooking all disapproval by the highest authorities of the *moral character* of the proceedings; nay, resiling from their own *previously professed intention* of interrogating a Court of Law in regard to the bare legality of any contested resolutions,—in the faith of which profession, such resolutions were allowed to pass *without protest*. In fact, they are now content to sit, if so permitted, even under the *judicial stigma* incidentally called forth on the way in which the trust has been administered. (Compromise, concession,—anything for non-discussion may be expected forthwith. This has, indeed, been significantly shewn, in their quiescence under (what they profess to consider as *illegal*) the proceedings of the Professor of Music.) But, had there been a respected board of Curators over the University, these proceedings would never even have been attempted; nor would a protesting minority now be compelled to share in the opprobrium of the very acts which they so cordially reprobated and so openly disavowed. See Appendix III. (A).]

IV.—ON THE STATE OF THE ENGLISH UNIVERSITIES,

WITH MORE ESPECIAL REFERENCE TO OXFORD.*

(JUNE, 1831.)

- 1.—*Addenda ad Corpus Statutorum Universitatis Oxoniensis.*
4to. Oxonii: 1825.
- 2.—*The Oxford University Calendar, for 1829.* 8vo. Oxford:
1829.

THIS is the age of reform.—Next in importance to our religious and political establishments, are the foundations for public education; and having now seriously engaged in a reform of “the constitution, the envy of surrounding nations,” the time cannot

* [In Crosse’s Selections; translated into German; and abridged by M. Peisse, &c.

When this article was written, the history of our oldest universities (Oxford and Cambridge) had fallen into oblivion; their parts and principles were not understood, even by themselves; nay, opinions asserted and universally accepted touching the most essential points of their constitution, not only erroneous, but precisely the reverse of truth. The more obvious sources of information did not remedy, when they did not countenance, the misapprehensions. Criticism, not compilation, was therefore requisite; and a correction of the more important errors, avoiding as much as possible all second-hand authorities,—this a collection of original documents, to say nothing of the more authentic histories of universities and academical antiquities, which I had succeeded in forming, has enabled me (I hope unostentatiously) to accomplish. The views in this and the subsequent articles, have been followed, (often silently,) without controversy, and almost without hesitation, both in this country and abroad; while even the trifling inaccuracies, into which I had inadvertently fallen, are faithfully copied by those who would be supposed to look and speak for themselves.]

be distant for a reform in the schools and universities which have hardly avoided their contempt. Public intelligence is not, as hitherto, tolerant of prescriptive abuses, and the country now demands—that endowments for the common weal should no longer be administered for private advantage. At this auspicious crisis, and under a ministry, no longer warring against general opinion, we should be sorry not to contribute our endeavour to attract attention to the defects which more or less pervade all our national seminaries of education, and to the means best calculated for their removal. We propose, therefore, from time to time, to continue to review the state of these establishments, considered both absolutely in themselves, and in relation to the other circumstances which have contributed to modify the intellectual condition of the different divisions of the empire.

In proceeding to the Universities, we commence with Oxford. This University is entitled to precedence, from its venerable antiquity, its ancient fame, the wealth of its endowments, and the importance of its privileges: but there is another reason for our preference.

Without attempting any idle and invidious comparison,—without asserting the superior or inferior excellence of Oxford in contrast with any other British University, we have no hesitation in affirming, that comparing what it actually is with what it possibly could be, Oxford is, of all academical institutions, at once the most imperfect and the most perfectible. Properly directed, as they might be, the means which it possesses would render it the most efficient University in existence; improperly directed, as they are, each part of the apparatus only counteracts another; and there is not a similar institution which, in proportion to what it ought to accomplish, accomplishes so little. But it is not in demonstrating the imperfection of the present system, that we principally ground a hope of its improvement; it is in demonstrating its *illegality*. In the reform of an ancient establishment like Oxford, the great difficulty is to initiate a movement. In comparing Oxford as it is, with an ideal standard, there may be differences of opinion in regard to the kind of change expedient, if not in regard to the expediency of a change at all; but, in comparing it with the standard of its own code of statutes, there can be none. It will not surely be contended that matters should continue as they are, if it can be shown that, as now administered, this University pretends only to accomplish a petty fraction of

the ends proposed to it by law, and attempts even this only by illegal means. But a progress being determined towards a state of right, it is easy to accelerate the momentum towards a state of excellence:—ἀρχὴ ἡμῶν πάντες.

Did the limits of a single paper allow us to exhaust the subject, we should, in the *first* place, consider the state of the University, both as established in law, but non-existent in fact, and as established in fact, but non-existent in law; in the *second*, the causes which determined the transition from the statutory to the illegal constitution; in the *third*, the advantages and disadvantages of the two systems; and, in the *fourth*, the means by which the University may be best restored to its efficiency. In the present article, we can, however, only compass,—and that inadequately,—the first and second heads. The third and fourth we must reserve for a separate discussion, in which we shall endeavour to demonstrate, that the intrusive system, compared with the legitimate, is as absurd as it is unauthorized,—that the preliminary step in a reform must be a return to the Statutory Constitution,—and that this constitution, though far from faultless, may, by a few natural and easy changes, be improved into an instrument of academical education, the most perfect perhaps in the world. The subject of our consideration at present requires a fuller exposition, not only from its intrinsic importance, but because, strange as it may appear, the origin, and consequently the cure, of the corruption of the English Universities, is totally misunderstood. The vices of the present system have been observed, and frequently discussed; but as it has never been shown in what manner these vices were generated, so it has never been perceived how easily their removal might be enforced. It is generally believed that, however imperfect in itself, the actual mechanism of education organized in these seminaries, is a time-honoured and essential part of their being, established upon statute, endowed by the national legislature with exclusive privileges, and inviolable as a vested right. We shall prove, on the contrary, that it is new as it is inexpedient,—not only accidental to the University, but radically subversive of its constitution,—without legal sanction, nay, in violation of positive law,—arrogating the privileges exclusively conceded to another system, which it has superseded,—and so far from being defensible by those it profits, as a right, that it is a flagrant usurpation, obtained through perjury, and only tolerated from neglect.

I. Oxford and Cambridge, as establishments for education, consist of two parts,—of the *University proper*, and of the *Colleges*. The former, original and essential, is founded, controlled, and privileged by public authority, for the advantage of the nation. The latter, accessory and contingent, are created, regulated, and endowed by private munificence, for the interest of certain favoured individuals. Time was, when the Colleges did not exist, and the University was there; and were the Colleges again abolished, the University would remain entire. The former, founded solely for education, exists only as it accomplishes the end of its institution; the latter, founded principally for aliment and habitation, would still exist, were all education abandoned within their walls. The University, as a national establishment, is necessarily open to the lieges in general; the Colleges, as private institutions, might universally do, as some have actually done,—close their gates upon all, except their foundation members.

The University and Colleges are thus neither identical, nor vicarious of each other. If the University ceases to perform its functions, it ceases to exist; and the privileges accorded by the nation to the system of public education legally organized in the University, cannot, without the consent of the nation,—far less without the consent of the academical legislature,—be lawfully transferred to the system of private education precariously organized in the Colleges, and over which neither the State nor the University have any control. *They have, however, been unlawfully usurped.*

Through the suspension of the University, and the usurpation of its functions and privileges by the Collegial bodies, there has arisen the second of two systems, diametrically opposite to each other.—The one, in which the University was paramount, is ancient and statutory; the other, in which the Colleges have the ascendant, is recent and illegal.—In the former, all was subservient to public utility, and the interests of science; in the latter, all is sacrificed to private monopoly, and to the convenience of the teacher.—The former amplified the means of education in accommodation to the mighty end which a university proposes; the latter limits the end which the University attempts to the capacity of the petty instruments which the intrusive system employs.—The one afforded education in all the Faculties; the other professes to furnish only elementary tuition in the lowest.

—In the authorized system, the cycle of instruction was distributed among a body of teachers, all professedly chosen from merit, and each concentrating his ability on a single object; in the unauthorised, every branch, necessary to be learned, is monopolized by an individual, privileged to teach all, though probably ill qualified to teach any.—The old system daily collected into large classes, under the same professor, the whole youth of the University of equal standing, and thus rendered possible a keen and constant and unremitted competition; the new, which elevates the colleges and halls into so many little universities, and in these houses distributes the students, without regard to ability or standing, among some fifty tutors, frustrates all emulation among the members of its small and ill-assorted classes.—In the superseded system, the Degrees in all the Faculties were solemn testimonials that the graduate had accomplished a regular course of study in the public schools of the University, and approved his competence by exercise and examination; and on these degrees, only as such testimonials, and solely for the public good, were there bestowed by the civil legislature, great and exclusive privileges in the church, in the courts of law, and in the practice of medicine. In the superseding system, Degrees in all the Faculties, except the lowest department of the lowest, certify neither a course of academical study, nor any ascertained proficiency in the graduate; and these now nominal distinctions retain their privileges to the public detriment, and for the benefit only of those by whom they have been deprived of their significance.—Such is the general contrast of the two systems, which we must now exhibit in detail.

i.) System *de jure*.—The *Corpus Statutorum* by which the University of Oxford is—we should say, *ought* to be—governed, was digested by a committee appointed for that purpose, through the influence of Laud, and solemnly ratified by King, Chancellor, and Convocation, in the year 1636. The far greater number of those statutes had been previously in force; and, except in certain articles subsequently added, modified, or restricted, (contained in the Appendix and Addenda,) they exclusively determine the law and constitution of the University to the present hour. Every member is bound by oath and subscription to their faithful observance.—In explanation of the statutory system of instruction, it may be proper to say a few words in regard to the history of academical teaching, previous to the publication of the Laudian Code.

In the original constitution of Oxford, as in that of all the older universities of the Parisian model, the business of instruction was not confided to a special body of privileged professors. The University was governed, the University was taught, by the graduates at large. Professor, Master, Doctor, were originally synonymous. Every graduate had an equal right of teaching publicly in the University the subjects competent to his faculty, and to the rank of his degree; nay, every graduate incurred the obligation of teaching publicly, for a certain period, the subjects of his faculty, for such was the condition involved in the grant of the degree itself. The Bachelor, or imperfect graduate, partly as an exercise towards the higher honour, and useful to himself, partly as a performance due for the degree obtained, and of advantage to others, was bound to read under a master or doctor in his faculty, a course of lectures; and the Master, Doctor, or perfect graduate, was, in like manner, after his promotion, obliged immediately to commence, (*incipere*,) and to continue for a certain period publicly to teach, (*regere*,) some at least of the subjects appertaining to his faculty. As, however, it was only necessary for the University to enforce this obligation of public teaching, compulsory on all graduates during the term of their *necessary regency*, if there did not come forward a competent number of *voluntary regents* to execute this function; and as the schools belonging to the several faculties, and in which alone all public or ordinary instruction could be delivered, were frequently inadequate to accommodate the multitude of the inceptors; it came to pass, that in these Universities the original period of necessary regency was once and again abbreviated, and even a dispensation from actual teaching during its continuance, commonly allowed.* At the same time, as the University only accomplished the end of its existence through its regents, they alone were allowed to enjoy full privileges in its legislation and government; they alone partook of its beneficia

* In Oxford, where the public schools of the Faculty of Arts, in *School Street*, were proportionally more numerous (there are known by name above forty sets of schools anciently open in that street, *i. e.* buildings, containing from four to sixteen class-rooms) than those in Paris belonging to the different nations of that faculty, in the *Rue de la Fouraille* (*Vicus Stramineus*),—in Oxford this dispensation was more tardily allowed. In Paris, the Master who was desirous of exercising this privilege of his degree, petitioned his faculty *pro regentia et scholis*; and schools, as they fell vacant, were granted to him by his nation, according to his seniority.

and sportulæ. In Paris, the non-regent graduates were only assembled on rare and extraordinary occasions; in Oxford, the regents constituted the House of Congregation, which, among other exclusive prerogatives, was anciently the initiatory assembly, through which it behoved that every measure should pass, before it could be submitted to the House of Convocation, composed indifferently of all regents and non-regents resident in the University.*

This distinction of regent and non-regent continued most rigidly marked in the Faculty of Arts,—the faculty on which the older universities were originally founded, and which was always greatly the most numerous. In the other faculties, both in Paris and Oxford, all doctors succeeded in usurping the style and privileges of *regent*, though not actually engaged in teaching; and in Oxford, the same was allowed to masters of the Faculty of Arts during the statutory period of their necessary regency, even when availing themselves of a dispensation from the performance of its duties; and extended to the Heads of Houses, (who were also in Paris *Regens d'honneur*,) and to College Deans. This explains the constitution of the Oxford House of Congregation at the present day.

The ancient system of academical instruction by the graduates at large, was, however, still more essentially modified by another innovation. The regents were entitled to exact from their auditors a certain regulated fee (*pastus, collecta*.) To relieve the scholars of this burden, and to secure the services of able teachers, salaries were sometimes given to certain graduates, on consideration of their delivery of ordinary lectures without collect. In many universities, attendance on these courses was specially required of those proceeding to a degree; and it was to the salaried graduates that the title of *Professors*, in academical language, was at last peculiarly attributed. By this institution of salaried lecturers, dispensation could be universally accorded to the other graduates. The unsalaried regents found, in general, their schools deserted for the gratuitous instruction of the privileged lecturers; and though the right of public teaching competent to every graduate still remained entire, its exercise was, in a great measure,

* It was only by an abusive fiction that those were subsequently held to be *Convictores*, or actual residents in the University, who retained their names on the books of a Hall, or College. See *Corpus Statutorum*, tit. x. § 1.

abandoned to the body of professors organized more or less completely in the several faculties throughout the universities of Europe. To speak only of Oxford, and in Oxford only of the Faculty of Arts: *ten* salaried Readers or Professors of the *seven arts* and the *three philosophies** had been nominated by the House of Congregation, and attendance on their lectures enforced by statute, long prior to the epoch of the Laudian digest. At the date of that code, the greater number of these chairs had obtained permanent endowments; and four only depended for a fluctuating stipend on certain fines and taxes levied on the graduates they relieved from teaching, and on the under-graduates they were appointed to teach. At that period it was, however, still usual for simple graduates to exercise their right of lecturing in the public schools. While this continued, ability possessed an opportunity of honourable manifestation; a nursery of experienced teachers was afforded; the salaried readers were not allowed to slumber in the quiescence of an unfringible monopoly; their election could less easily degenerate into a matter of interest and favour; while the student, presented with a more extensive sphere of information, was less exposed to form exclusive opinions, when hearing the same subjects treated by different lecturers in different manners. These advantages have, by such an arrangement, been secured in the German universities.

In Oxford, the *Corpus Statutorum* introduced little or no change in the mechanism of academical instruction; nor has this been done by any subsequent enactment. On the contrary, the most recent statutes on the subject—those of 1801 and 1808—recog-

* The Faculty of Arts originally comprehended, besides the three philosophies, the whole seven arts. Of these latter, some were, however, at different times, thrown out of the faculty, or separated from the other arts, and special degrees given in them, either apart from, or in subordination to, the general degree. Thus, in Oxford (as in other of the older Universities), special degrees were given in Grammar, in Rhetoric, and in Music. The two former subjects were again withdrawn into the faculty, and their degrees waxed obsolete,—but Music and its degree still remain apart.—The General Sophist was a special degree in Logic, but subordinate to the general degree in Arts.—It is needless to say, that these particular degrees gave no entry into the academical assemblies. The historians of the universities of Paris and Oxford have misconceived this subject, from not illustrating the practice of the one school by that of the other. Duboullay and Wood knew nothing of each other's works, though writing at the same time, and Crevier never looked beyond Duboullay.

nise the ancient system ratified under Laud, as that still in force, and actually in operation. (Corp. Stat. T. iv. Add. p. 129—133. p. 190—192.) The scheme thus established *in law*, though now abolished *in fact*, is as follows :—

Education is afforded in all the faculties in which degrees are granted, by the University itself, through its accredited organs, the *public readers* or *professors*,—a regular attendance on whose lectures during a stated period is in every faculty *indispensably* requisite to qualify for a degree. To say nothing of Music, the University grants degrees, and furnishes instruction in four faculties,—*Arts, Theology, Civil Law, and Medicine*.*

In *ARTS* there are established *eleven* Public Readers or Professors ; a regular attendance on whose courses is necessary during a period of four years to qualify for Bachelor,—during seven, to qualify for Master. The student must frequent, during the first year, the lectures on Grammar and Rhetoric ; during the second, Logic and Moral Philosophy ; during the third and fourth, Logic and Moral Philosophy, Geometry and Greek ; during the fifth, (bachelors of first year,) Geometry, Metaphysics, History, Greek,—and Hebrew, if destined for the church ; during the sixth and seventh, Astronomy, Natural Philosophy, Metaphysics, History, Greek,—and Hebrew, if intending divines.

To commence student in the faculty of *THEOLOGY*, a Master-ship in Arts is a requisite preliminary. There are two Professors of Divinity, on whom attendance is required, during seven years for the degree of Bachelor, and subsequently during four for that of Doctor.

In the faculty of *CIVIL LAW* there is one Professor. The student is not required to have graduated in Arts ; but if a Master in that faculty, three years of attendance on the professor qualify him for a Bachelor's degree, and four thereafter for a Doctor's. The simple student must attend his professor during five years for Bachelor, and ten for Doctor ; and previous to commencing stu-

* Since the Reformation, as the subject of the faculty of Canon Law was no longer taught, degrees in that faculty were very properly by Royal order discontinued, (that faculty and its degrees being formally abolished by Henry VIII. in the Universities;) though the Canon Law has continued still to reign, and the papal abuses to prevail in the ecclesiastical courts of justice to the present hour. But why, it may be asked, are degrees still suffered to continue in the other faculties, when the relative instruction is no longer afforded ?

dent in this faculty, he must have frequented the courses of logic, moral and political philosophy, and of the other humane sciences during two years, and history until his presentation for Bachelor. By recent statute, to commence the study of law, it is necessary to pass the examination for Bachelor of Arts.

To commence student in MEDICINE, it is necessary to have obtained a Mastership in Arts, and thereafter the candidate, (besides a certain attendance on the Prælector of Anatomy,) must have heard the Professor of Medicine during three years for the degree of Bachelor, and again during four years for that of Doctor.*

The Professors are bound to lecture during term, with exception of Lent, *i. e.* for about six months annually, twice a-week, and for two full hours;† and penalties are incurred by teacher and student for any negligence in the performance of their several duties. Among other useful regulations, it was here, as in other ancient universities, enjoined, "that after lecture, the Professors should tarry for some time in the schools; and if any scholar or auditor may wish to argue against what has been delivered from the chair, or may otherwise have any dubiety to resolve, that they should listen to him kindly, and satisfy his difficulties and doubts."

But though a body of Professors was thus established as the special organ through which the University effected the purposes of its institution, the right was not withdrawn, nay, *is expressly declared to remain inviolate*, which every Master and Doctor possessed in virtue of his degree, of opening in the public schools a course of lectures on any of the subjects within the compass of his faculty. (Corp. St. T. iv. § 1.)

But besides the public and principal means of instruction afforded by the Professors and other Regents in the University, the student was subjected until his first degree, or during the first four years of his academical life, to the subsidiary and private discipline of a *Tutor* in the Hall or College to which he belonged. This regulation was rendered peculiarly expedient by circum-

* Of several other chairs subsequently established, we make no mention, as these were never constituted into necessary parts of the academical system.

† Previously to Laud's statutes, the professors in general were bound to lecture *daily*, and all, if we recollect, at least *four times* a-week. The change was absurd. It was *standing* which should have been shortened.

stances which no longer exist. Prior to the period of the Laudian digest, it was customary to enter the University at a very early age; and the student of those times, when he obtained the rank of Master, was frequently not older than the student of the present when he matriculates. It was of course found useful to place these academical boys under the special guardianship of a tutor during the earlier years of their residence in the University; as it was also expedient to counteract the influence of Popish tutors. With this, however, as a merely private concern, the University did not interfere; and we doubt, whether before the chancellorship of the puritanical Leicester, any attempt was made to regulate, by academical authority, the character of those who might officiate in this capacity, or before the chancellorship of Laud, to render imperative the entering under a tutor at all, and a tutor resident in the same house with the pupil. (Compare Wood's Annals, a. 1581, and Corp. Stat. T. iii. § 2.) Be this, however, as it may, the tutorial office was viewed as one of very subordinate importance in the statutory system. *To commence tutor*, it was only necessary for a student to have the lowest degree in arts, and that his learning, his moral and religious character, should be approved of by the head of the house in which he resided, or, in the event of controversy on this point, by the vice-chancellor. All that was expected of him was, "to imbue his pupils with good principles, and institute them in approved authors; but above all, in the rudiments of religion, and the doctrine of the Thirty-nine Articles; and that he should do all that in him lay to render them conformable to the Church of England." "It is also his duty to contain his pupils within statutory regulations in matters of external appearance, such as their clothes, boots, and hair; which if the pupils are found to transgress, the tutor for the first, second, and third offence, shall forfeit six and eightpence, and for the fourth, shall be interdicted from his tutorial function by the vice-chancellor." (T. iii. § 2.)—Who could have anticipated from this statute what the tutor was ultimately to become?

The preceding outline is sufficient to show, that by statute the University of Oxford proposes an end not less comprehensive than other universities, and attempts to accomplish that end by the same machinery which they employ. It proposes as its adequate end, the education of youth in the four faculties of arts, theology, law, and medicine; and for accomplishment of this, a

body of public lecturers constitute the instrument which it principally, if not exclusively, employs. But as the University of Oxford only executes its purpose, and therefore only realises its existence, through the agency of its professorial system; consequently, whatever limits, weakens, or destroys the efficiency of that system, limits, weakens, and destroys the university itself. With the qualities of this system, as organised in Oxford, we have at present no concern. We may, however, observe, that if not perfect, it was perfectible; and at the date of its establishment, there were few universities in Europe which could boast of an organization of its public instructors more complete, and none perhaps in which that organization was so easily susceptible of so high an improvement.

ii.) In the system *de facto* all is changed. The University is in abeyance;—" *Stat magni nominis umbra.*" In none of the faculties is it supposed that the Professors any longer furnish the instruction necessary for a degree. Some chairs are even nominally extinct where an endowment has not perpetuated the sinecure; and the others betray, in general, their existence only through the Statutes. If the silence of "the schools" be occasionally broken by a formal lecture, or if on some popular subjects (fees being now permitted) a short course be usually delivered; attendance on these is not more required or expected, than attendance in the music-room. For every degree in every faculty above Bachelor of Arts, standing on the Collegio books, is allowed to count for residence in the university, and attendance on the public courses; and though, under these circumstances, examinations be more imperatively necessary, an examination only exists for the elementary degree, of which residence is also a condition.

It is thus not even pretended that Oxford any longer supplies more than the preliminary of an academical education. Even this is not afforded by the University, but abandoned to the Colleges and Halls; and now, therefore, Oxford is not *one public University*, but merely a *collection of many private schools*. The University, in fact, exists only in semblance, for the behoof of the unauthorized seminaries by which it has been replaced, and which have contrived, under covert of its name, to slip into possession of its public privileges.*

* How completely the *University* is annihilated,—how completely even all

But as academical education was usurped by the Tutors from the Professors,—so all tutorial education was usurped by the *Fellows* from the other graduates. The fellows exclusively teach all that Oxford now deems necessary to be taught; and as every tutor is singly vicarious of the whole ancient body of professors, —*ἀντὶ πολλῶν ἀνταξίαις ἄλλων*,—the present capacity of the University to effect the purposes of its establishment must, consequently, be determined by the capacity of *each fellow-tutor* to compass the *cyclopædia of academical instruction*. If Oxford accomplishes the ends of a University even in its lowest faculty, every fellow-tutor must be a second "*Doctor Universalis*,"

"Qui tria, qui septem, qui totum scibile scivit."

But while thus resting her success on the *most extraordinary* ability of her teachers, we shall see that she makes no provision even for their *most ordinary* competence.

As the fellowships were not founded for the purposes of teaching, so the qualifications that constitute a fellow are not those that constitute an instructor. The Colleges owe their establishment

memory of its history, all knowledge of its constitution, have perished in Oxford, is significantly shown in the following passage, written not many years ago, by a very able defender of things as they now are in that seminary. "There are, moreover," says Bishop Coplestone, "some points in the constitution of this place, which are carefully kept out of sight by our revilers, but which ought to be known and well considered, before any comparison is made between what we are, and what we ought to be. THE UNIVERSITY OF OXFORD IS NOT A NATIONAL FOUNDATION. It is a *congeries of foundations*, originating some in royal munificence, but more in private piety and bounty. They are moulded indeed into one corporation; but each one of our twenty Colleges is a corporation by itself, and has its own peculiar statutes, not only regulating its internal affairs, but confining its benefits by a great variety of limitations." (Reply to the Calumnies of the Edinburgh Review, p. 183.) In refutation of this uncontradicted assertion, which is not simply wrong, but diametrically opposed to the truth, we shall content ourselves with merely quoting a sentence from the "Abstract of divers Privileges and Rights of the University of Oxford," by the celebrated Dr Wallis, the least of whose merits was an intimate acquaintance with the history and constitution of the establishment of which he was Registrar. "The rights or privileges (whatever they be) [are] not granted or belonging to Scholars *as living in Colleges, &c.* but to Colleges, &c., *as houses inhabited by Scholars*, the Colleges which we now have *being accidental to the corporation of the University*, and the confining of Scholars now to a certain number of Colleges and Halls *being extrinsic to the University, and by a law of their own making*, each College (but not the Halls) being a distinct corporation from that of the University."

to the capricious bounty of individuals; and the fellow rarely owes his eligibility to merit alone, but in the immense majority of cases to fortuitous circumstances.* The fellowships in Oxford are, with few exceptions, limited to founder's kin,—to founder's kin, born in particular counties, or educated at particular schools, —to the scholars of certain schools, without restriction, or narrowed by some additional circumstances of age or locality of birth, —to the natives of certain dioceses, archdeaconries, islands, counties, towns, parishes or manors, under every variety of arbitrary condition. In some cases the candidate must be a graduate of a certain standing, in others he must not; in some he must be in orders, perhaps priest's, in others he is only bound to enter the church within a definite time. In some cases the fellow may freely choose his profession; in general he is limited to theology, and in a few instances must proceed in law or medicine. The nomination is sometimes committed to an individual, sometimes to a body of men, and these either within or without the College and University; but in general it belongs to the fellows. The elective power is rarely, however, deposited in worthy hands; and even when circumstances permit any liberty of choice, desert has too seldom a chance in competition with favour. With one unimportant exception, the fellowships are perpetual; but they are vacated by marriage, and by acceptance of a living in the Church above a limited amount. They vary greatly in emolument in different Colleges; and in the same Colleges the differ-

* This is candidly acknowledged by the intelligent apologist just quoted.

"In most Colleges the fellowships are appropriated to certain schools, dioceses, counties, and in some cases even to parishes, with a preference given to the founder's kindred for ever. Many qualifications, quite foreign to intellectual talents and learning, are thus enjoined by the founders; and in *very few* instances is a free choice of candidates allowed to the fellows of a College, upon any vacancy in their number. *Merit therefore has not such provision* made as the extent of the endowments might seem to promise. Now it is certain that each of these various institutions is not the best. The best of them perhaps are those [in only *two* Colleges] where an unrestrained choice is left among all candidates who have taken one degree. The worst are those which are appropriated to schools, from which boys of sixteen or seventeen are forwarded to a fixed station and emolument, which nothing can forfeit but flagrant misconduct, and which no exertion can render more valuable." (Reply to the Calmies, &c. p. 183.) We may add, that even where "a free choice of candidates is allowed," the electors are not always animated by the spirit which has latterly prevailed in the Colleges,—of Balliol and Oriel, Oxford, of Trinity, Cambridge.

ence is often considerable between those on different foundations, and on the same foundations between the senior and the junior fellowships. Some do not even afford the necessaries of life; others are more than competent to its superfluities. Residence is *now* universally dispensed with; though in some cases certain advantages are only to be enjoyed on the spot. In the Church, the Colleges possess considerable patronage; the livings as they fall vacant are at the option of the fellows in the order of seniority; and the advantage of a fellowship depends often less on the amount of salary which it immediately affords, than on the value of the preferment to which it may ultimately lead.

But while, as a body, the fellows can thus hardly be supposed to rise above the vulgar average of intelligence and acquirement: so, of the fellows, it is not those best competent to its discharge who are generally found engaged in the business of tuition.

In the *first* place, there is no power of adequate selection, were there even sufficient materials from which to choose. The head (himself, of the same leaven with the fellows,) cannot be presumed greatly to transcend their level; and he is peculiarly exposed to the influence of that party spirit by which collegial bodies are so frequently distracted. Were his approbation of tutors, therefore, free, we could have no security for the wisdom and impartiality of his choice. But, in point of fact, he can only legally refuse his sanction on the odious grounds of ignorance, vice, or irreligion. The tutors are thus virtually self-appointed.

But in the *second* place, a fellow constitutes himself a tutor, not because he suits the office, but because the office is convenient to him. The standard of tutorial capacity and of tutorial performance is in Oxford too low to frighten even the diffident or lazy. The advantages of the situation in point either of profit or reputation, are not sufficient to tempt ambitious talent; and distinguished ability is sure soon to be withdrawn from the vocation,—if marriage does not precipitate a retreat.* The

* "So far from a College being a drain upon the world, the world drains Colleges of their *most efficient* members; and although the University *thus becomes a more effectual engine of education* [! how?] it loses much of that characteristic feature it once had, as a residence of learned leisure, and an emporium of literature."—Reply to the Calumnies, &c., p. 185.—[Adam Smith, who was himself of Oxford, has some good observations upon this rapid drainage and its effect in sinking the University.]

fellow who in general undertakes the office, and continues the longest to discharge it, is a clerical expectant whose hopes are bounded by a College living; and who, until the wheel of promotion has moved round, is content to relieve the tedium of a leisure life by the interest of an occupation, and to improve his income by its emoluments. Thus it is that tuition is not solemnly engaged in as an important, arduous, responsible, and permanent occupation; but lightly viewed and undertaken, as a matter of convenience, a business by the by, a state of transition, a stepping-stone to something else;—in a word, as a *pass-time*.

But in the *third* place, were the tutors not the creatures of accident, did merit exclusively determine their appointment, and did the situation tempt the services of the highest talent, still it would be impossible to find a complement of able men equal in number to the cloud of tutors whom Oxford actually employs.

This general demonstration of what the fellow-tutors of Oxford *must be*, is more than confirmed by a view of what they *actually are*.—It is not contended that the system excludes men of merit, but that merit is in general the accident, not the principle, of their appointment. We might, therefore, always expect, on the common doctrine of probabilities, that among the multitude of college tutors, there should be a few known to the world for ability and erudition. But we assert, without fear of contradiction, that, on the average, *there is to be found among those to whom Oxford confides the business of education, an infinitely smaller proportion of men of literary reputation, than among the actual instructors of any other University in the world*. For example: the second work at the head of this article exhibits the names of above forty fellow-tutors; yet among these we have not encountered a single individual of whose literary existence the public is aware. This may be an unfavourable accident; but where is the University, out of Britain, of which so little could at any time be said of its instructors? [See Appendix III. (C.)]

We at present consider the system *de facto* in itself, and without reference to its effects; and say nothing of its qualities, except in so far as these are involved in the bare statement of its organization. So much, however, is notorious: either the great University of Oxford *does not now attempt to accomplish what it was established to effect*, and what every, even the meanest, University proposes; or it attempts this by means inversely proportioned to

the end, and thus ludicrously fails in the endeavour. That there is much of good, much worthy of imitation by other Universities, in the present spirit and present economy of Oxford, we are happy to acknowledge, and may at another time endeavour to demonstrate. But this good is *occasioned*, not *effected*; it exists, not in consequence of any excellence in the instructors,—and is only favoured in so far as it is compatible with the interest of those private corporations, who administer the University exclusively for their own benefit. As *at present organized*, it is a doubtful problem whether the tutorial system ought not to be abated as a nuisance. For if some tutors may afford assistance to some pupils, to other pupils other tutors prove equally an impediment. We are no enemies of collegial * residence, no enemies of a tutorial discipline, even now when its former necessity has in a great measure been superseded. To vindicate its utility under present circumstances, it must, however, be raised not merely from its actual corruption, but even to a higher excellence than it possessed by its original constitution. A tutorial system in subordination to a professorial (which Oxford formerly enjoyed) we regard as affording *the condition of an absolutely perfect University*. But the tutorial system as now dominant in Oxford, is vicious: 1°, in its *application*,—as usurping the place of the professorial, whose function, under any circumstances, it is inadequate to discharge; 2°, in its *constitution*,—the tutors as now fortuitously appointed, being, as a body, incompetent even to the duties of subsidiary instruction.

II. We come now to our second subject of consideration:—To inquire by what *causes* and for what *ends* this revolution was accomplished; how the English Universities, and in particular Oxford, passed from a *legal* to an *illegal* state, and from *public*, were degraded into *private schools*?—The answer is precise: *This was effected solely by the influence, and exclusively for the advantage, of the Colleges*. But it requires some illustration to understand, how the interest of these private corporations was opposed to that of the public institution, of which they were the accidents; and how their domestic tuition was able gradually

* [In regard to this word which, in the sequel, it will be requisite frequently to employ, it is to be observed;—that *collegiate* is vulgarly abused for *collegial*, although these words in English ought to be applied with the same distinction as in Latin, *collegiatus* and *collegialis*.]

to undermine, and ultimately to supersede, the system of academical lectures in aid of which it was established.

Though Colleges be unessential accessories to a University, yet common circumstances occasioned, throughout all the older Universities, the foundation of conventual establishments for the habitation, support, and subsidiary discipline of the student; and the date of the earliest Colleges is not long posterior to the date of the most ancient Universities. Establishments of this nature are thus not peculiar to England; and like the greater number of her institutions, they were borrowed by Oxford from the mother University of Paris—but with peculiar and important modifications. A sketch of the Collegial system as variously organized, and as variously affecting the academical constitution in foreign Universities, will afford a clearer conception of the distinctive character of that system in those of England, and of the paramount and unexampled influence it has exerted in determining their corruption.

The causes which originally promoted the establishment of Colleges, were very different from those which subsequently occasioned their increase, and are to be found in the circumstances under which the *earliest* Universities sprang up. The great concourse of the studious, counted by tens of thousands, and from every country of Europe, to the illustrious teachers of Law, Medicine, and Philosophy, who in the twelfth and thirteenth centuries delivered their prelections in *Bologna*, *Salerno*, and *Paris*, necessarily occasioned, in these cities, a scarcity of lodgings, and an exorbitant demand for rent. Various means were adopted to alleviate this inconvenience, but with inadequate effect; and the hardships to which the poorer students were frequently exposed, moved compassionate individuals to provide houses, in which a certain number of indigent scholars might be accommodated with free lodging during the progress of their studies. The manners, also, of the cities in which the early Universities arose, were, for obvious reasons, more than usually corrupt; and even attendance on the public teachers forced the student into dangerous and degrading associations.* Piety thus concurred with benevolence,

* "Tunc autem," says the Cardinal de Vitry, who wrote in the first half of the thirteenth century, in speaking of the state of Paris,—"*tunc autem amplius in Clero quam in alio populo dissoluta (Lutetia sc.), tamquam capra scabiosa et ovis morbida, pernicioso exemplo multos hospites suos undique ad eam affluentes corrumpibat, habitatores suos devorans et in profundum*

in supplying houses in which poor scholars might be harboured without cost, and youth, removed from perilous temptation, be placed under the control of an overseer; while an example was afforded for imitation in the *Hospitia* which the religious orders established in the University towns, for those of their members who were now attracted, as teachers and learners, to these places of literary resort.* Free board was soon added to free lodging; and a small bursary or stipend generally completed the endowment. With moral superintendence was conjoined literary discipline, but still in subservience to the public exercises and lectures: opportunity was thus obtained of constant *disputation*, to which the greatest importance was wisely attributed, through all the scholastic ages; while books, which only affluent individuals could then afford to purchase, were supplied for the general use of the indigent community.

But as *Paris* was the University in which collegial establishments were first founded, so Paris was the University in which they soonest obtained the last and most important extension of their purposes. Regents were occasionally taken from the public schools, and placed as regular lecturers within the Colleges. Sometimes nominated, always controlled, and only degraded by their Faculty, these lecturers were recognised as among its regular teachers; and the same privileges accorded to the attendance on their College courses, as to those delivered by other graduates in the common schools of the University. Different Colleges thus afforded the means of academical education in certain departments of a faculty,—in a whole faculty,—or in several faculties; and so far they constituted particular

demergens, simplicem fornicationem nullum peccatum reputabat. Meretrices publicæ, ubique per vicos et plateas civitatis, passim ad lupanaria sua clericos transeuntes quasi per violentiam pertrahabant. Quod si forte ingredi recusarent, confestim eos 'Sodomitas,' post ipsos conclamantes, dicebant. In una autem et eadem domo, scholæ erant superius, prostibula inferius. In parte superiori magistri legebant, in inferiori meretrices officia turpitudinis exercebant. Ex una parte, meretrices inter se et cum Cœnonibus [lenonibus] litigabant; ex alia parte, disputantes et contentiosi agentes clerici proclamabant."—(Jacobi de Vitriaco Hist. Occident. cap. vii.)—It thus appears, that the Schools of the Faculty of Arts were not as yet established in the *Rue de la Foularde*. At this date in Paris, as originally also in Oxford, the lectures and disputations were conducted by the masters in their private habitations.

* [In Italy the Colleges seem never to have gone beyond this. See Facciolati Syntagma x.]

incorporations of teachers and learners, apart from, and, in some degree, independent of, the general body of the University. They formed, in fact, so many petty Universities, or so many fragments of a University. Into the Colleges, thus furnished with professors, there were soon admitted to board and education pensioners, or scholars, not on the foundation; and nothing more was wanting to supersede the lecturer in the public schools, than to throw open these domestic classes to the members of the other Colleges, and to the *martinets* or scholars of the University not belonging to Colleges at all. In the course of the fifteenth century this was done; and the University and Colleges were thus intimately united.—The College Regents, selected for talent, and recommended to favour by their nomination, soon diverted the students from the unguaranteed courses of the lecturers in the University schools.—The prime faculties of Theology and Arts became at last exclusively collegial. With the exception of two courses in the great *College of Navarre*, the lectures, disputations, and acts of the *Theological Faculty* were confined to the college of the *Sorbonne*; and the *Sorbonne* thus became convertible with the Theological Faculty of Paris.—During the latter half of the fifteenth century, the "*famous Colleges*," or those "*of complete exercise*," (cc. magna, celebria, famosa, famata, de plein exercise,) in the *Faculty of Arts*, amounted to *eighteen*,—a number which, before the middle of the seventeenth, had been reduced to *ten*. About eighty others, (cc. parva, non celebria,) of which above a half still subsisted in the eighteenth century, taught either only the subordinate branches of the faculty, (grammar and rhetoric,) and this only to those on the foundation, or merely afforded habitation and stipend to their bursars, now admitted to education in all the larger colleges, with the illustrious exception of Navarre. The *Rue de la Fouarre*, (*vicus stramineus*), which contained the *schools belonging to the different Nations of the Faculty*, and to which the lectures in philosophy had been once exclusively confined, became less and less frequented; until at last the public chair of Ethics, long perpetuated by an endowment, alone remained; and "*The Street*" would have been wholly abandoned by the university, had not the acts of *Determination*, the forms of *Inceptorship*, and the *Examinations* of some of the Nations, still connected the Faculty of Arts with this venerable site. "The colleges of full exercise," in this faculty, continued to combine the objects of a classical school and university: for, besides the art of *grammar*

taught in six or seven consecutive classes of humanity or ancient literature, they supplied courses of *rhetoric, logic, metaphysics, physics, mathematics, and morals*; the several subjects, taught by different professors. A free competition was thus maintained between the Colleges; the principals had every inducement to appoint only the most able teachers; and the emoluments of the rival professors (who were not astricted to celibacy) depended mainly on their fees. A blind munificence quenched this useful emulation. In the year 1719, fixed salaries and retiring pensions were assigned by the crown to the College Regents; the lieges at large now obtained the gratuitous instruction which the poor had always enjoyed, but the University gradually declined.

After Paris, no continental University was more affected in its fundamental faculty by the collegial system than *Louvain*. Originally, as in Paris, and the other Universitics of the Parisian model, the lectures in the Faculty of Arts were exclusively delivered by the regents *in vico*, or in the *general schools*, to each of whom a certain subject of philosophy, and a certain hour of teaching, was assigned. Colleges were founded; and in some of these, during the fifteenth century, *particular schools* were established. The regents in these colleges were not disowned by the faculty, whose graduates they were, and to whose control they were subjected. Here, as in Paris, the lectures by the regents *in vico* gradually declined, till at last the three public professorships of *Ethics, Rhetoric, and Mathematics*, perpetuated by endowment, were in the seventeenth century the only classes that remained open in the halls of the Faculty of Arts, in which, besides other exercises, the *Quodlibetic Disputations* were still annually performed. The general tuition of that faculty was conducted in *four rival colleges of full exercise*, or *Pædagogia*, as they were denominated, in contradistinction to the other colleges, which were intended less for the education, than for the habitation and aliment of youth, during their studies. These last, which amounted to above *thirty*, sent their bursars for education to the *four* privileged Colleges of the Faculty; to one or other of which these minor establishments were in general astricted. In the *Pædagogia*, (with the single exception of the *Collegium Porci*;) Philosophy alone was taught, and this under the fourfold division of *Logic, Physics, Metaphysics, and Morals*, by four ordinary professors and a principal. Instruction in the *Litteræ Humaniores*, was, in the seventeenth century, discontinued in the other three, (*cc. Castri, Liliæ, Falconis*);—the earlier

institution in this department being afforded by the oppidan schools then everywhere established; the higher by the *Collegium Gandense*; and the highest by the three professors of Latin, Greek, and Hebrew literature, in the *Collegium Trilingue*, founded in 1517, by Hieronymus Buslidius—a memorable institution, imitated by Francis I. in Paris, by Fox and Wolsey in Oxford, and by Ximenes in Alcala de Henares. In the *Pædagogia* the discipline was rigorous; the diligence of the teachers admirably sustained by the rivalry of the different Houses; and the emulation of the students, roused by daily competition in their several classes and colleges, was powerfully directed towards the great general contest, in which all the candidates for a degree in arts from the different *Pædagogia* were brought into concurrence,—publicly and minutely tried by sworn examiners,—and finally arranged with rigorous impartiality in the strict order of merit. *This competition for academical honours, long the peculiar glory of Louvain*, is only to be paralleled by the present examinations in the English Universities; * we may explain the former when we come to speak of the latter.—[See Reid's Works, p. 721 sq.]

In *Germany* collegial establishments did not obtain the same preponderance as in the Netherlands and France. In the older universities of the empire, the academical system was not essentially modified by these institutions: and in the universities founded after the commencement of the sixteenth century, they were rarely called into existence. In Prague, Vienna, Heidelberg, Cologne, Erfurt, Leipsic, Rostock, Ingolstadt, Tübingen, &c., we find conventual establishments for the habitation, aliment, and superintendence of youth; but these, always subsidiary to the public system, were rarely able, after the revival of letters, to maintain their importance even in this subordinate capacity.

In *Germany*, the name of *College* was usually applied to foundations destined principally for the residence and support of the academical teachers; the name of *Bursa* was given to houses inhabited by students, under the superintendence of a graduate in arts. In the Colleges, which were comparatively rare, if scholars were admitted at all, they received free lodging or free board,

* We suspect that the present Cambridge scheme of examination and honours was a direct imitation of that of Louvain. The similarity in certain points seems too precise to be accidental. The deplorable limitation of the former, is of course quite original.—[The previous suspicion is, I am now convinced, unfounded.—See also Appendix III. (B).]

but not free domestic tuition; they were bound to be diligent in attendance on the lectures of the public readers in the University; and the governors of the house were enjoined to see that this obligation was faithfully performed. The Bursæ, which corresponded to the ancient Halls of Oxford and Cambridge, prevailed in all the older Universities of Germany. They were either benevolent foundations for the reception of a certain class of favoured students, who had sometimes also a small exhibition for their support (*bb. privata*): or houses licensed by the Faculty of Arts, to whom they exclusively belonged, in which the students admitted were bound to a certain stated contribution (*positio*) to a common exchequer (*bursa*—hence the name), and to obedience to the laws by which the discipline of the establishment was regulated, (*bb. communes*.) Of these varieties, the second was in general engrafted on the first. Every bursa was governed by a graduate (*rector, conventor*;) and in the larger institutions, under him, by his delegate (*conrector*) or assistants (*magistri conventores*.) In most Universities it was enjoined that every regular student in the Faculty of Arts should enrol himself of a bursa; but the bursa was also frequently inhabited by masters engaged in public lecturing in their own, or in following the courses of a higher faculty. To the duty of Rector belonged a general superintendence of the diligence and moral conduct of the inferior members, and (in the larger bursæ, with the aid of a *procurator* or *æconomus*) the management of the funds destined for the maintenance of the house. As in the colleges of France and England, he could enforce discipline by the infliction of corporeal punishment.* Domestic instruction was generally introduced into these establishments, but, as we said, only in subservience to the public. The rector, either by himself or deputies, repeated with his bursars their public lessons, resolved difficulties they might propose, supplied deficiencies in their knowledge, and moderated at the performance of their private disputations.

The philosophical controversies which, during the Middle Ages, divided the universities of Europe into hostile parties, were waged with peculiar activity among a people, like the Germans, actuated, more than any other, by speculative opinion, and the spirit of sect.

* [It is recorded, as I recollect, in the life of Ignatius Loyola, by Maffei, that the ex-Warrior, the Future saint and founder of the Society of Jesus, was, when thirty years of age, whipped as a student in one of the colleges of Paris. Of Bacon the same is narrated in Cambridge; but when a mere boy.]

The famous question touching the nature of Universals, which created a schism in the University of Prague, and thus founded the University of Leipsic; which formally separated into two, the Faculty of Arts, (called severally the *via antiqua* or realist, and the *via moderna* or nominalist,) in Ingolstadt, Tübingen, Heidelberg, &c.; and occasioned a ceaseless warfare in the other schools of philosophy throughout the empire:—this question modified the German bursæ in a far more decisive manner than it affected the colleges in the other countries of Europe. The Nominalists and Realists withdrew themselves into different bursæ; whence, as from opposite castles, they daily descended to renew their clamorous, and not always bloodless contests, in the arena of the public schools. In this manner the bursæ of Ingolstadt, Tübingen, Heidelberg, Erfurth, and other universities, were divided between the partisans of the *Via Antiquorum*, and the partisans of the *Via Modernorum*; and in some of the greater schools, the several sects of Realism—as the Albertists, Thomists, Scotists,—had bursæ of their “*peculiar process*.”—[Thus in Cologne.]

The effect of this was to place these institutions more absolutely under that scholastic influence which swayed the Faculties of Arts and Theology; and however adverse were the different sects, when a common enemy was at a distance, no sooner was the reign of scholasticism threatened by the revival of polite letters, than their particular dissensions were merged in a general syncretism, to resist the novelty equally obnoxious to all,—a resistance which, if it did not succeed in obtaining the absolute proscription of humane literature in the Universities, succeeded, at least, in excluding it from the course prescribed for the degree in Arts, and from the studies authorised in the bursæ, of which that faculty had universally the control.* In their relations to the revival of ancient learning, the bursæ of Germany, and the colleges of France and England, were directly opposed; and to this contrast is, in part, to be attributed the difference of their fate. The colleges, indeed, mainly owed their stability,—in England to their wealth, in France to their coalition with the University. But in harbouring the rising literature, and rendering themselves instrumental to its progress, the colleges seemed anew to vindicate their utility, and remained, during the revolutionary crisis at least, in unison with the spirit of the age. The

* [See the article on the *Epistolæ Obscurorum Virorum*.]

bursæ, on the contrary, fell at once into contempt with the antiquated learning which they so fondly defended; and before they were disposed to transfer their allegiance to the dominant literature, other instruments had been organized, and circumstances had superseded their necessity. The philosophical faculty to which they belonged, had lost, by its opposition to the admission of humane letters into its course, the consideration it formerly obtained; and in the Protestant Universities of the Empire a degree in Arts was no longer required as a necessary passport to the other faculties. The Gymnasias, established or multiplied on the Reformation throughout Protestant Germany, sent the youth to the universities with sounder studies, and at a maturer age; and the public prelections, no longer intrusted to the fortuitous competence of the graduates, were discharged, in chief, by Professors carefully selected for their merit,—rewarded in exact proportion to their individual value in the literary market,—and stimulated to exertion by a competition unexampled in the academical arrangements of any other country. The discipline of the *bursæ* was now found less useful in aid of the University; and the student less disposed to submit to their restraint. No wealthy foundations perpetuated their existence independently of use; and their services being found too small to warrant their maintenance by compulsory regulations, they were soon generally abandoned.—[The name of *Bursch* (student) alone survives.]

In the *English Universities*, the history of the collegial element has been very different. Nowhere did it deserve to exercise so small an influence; nowhere has it exercised so great. The colleges of the continental Universities were no hospitals for drones; their foundations were exclusively in favour of *teachers* and *learners*; the former, whose number was determined by their necessity, enjoyed their stipend under the condition of instruction; and the latter, only during the period of their academical studies. In the English colleges, on the contrary, the fellowships, with hardly an exception, are perpetual, not burdened with tuition, and indefinite in number. In the foreign colleges, the instructors were chosen from competence. In those of England, and especially in those of Oxford, the fellows, in general, owe their election to chance. Abroad, as the colleges were visited, superintended, regulated, and reformed by their Faculty, their lectures were acknowledged by the University as public courses, and the lecturers themselves at last recognised as its privileged professors. In England, as the University

did not exercise the right of visitation over the colleges, their discipline was viewed as private and subsidiary; while the Fellow was never recognised as a public academical character, far less as a privileged academical instructor. In Paris and Louvain, the college discipline superseded only the precarious lectures of the graduates at large.* In Oxford and Cambridge, it was an improved and improvable system of professorial education that the tutorial extinguished. In the foreign Universities, the right of academical instruction was deputed to a limited number of "famous colleges," and in these only to a full body of co-operative teachers. In Oxford, all academical education is usurped, not only by every House, but by every Fellow-Tutor it contains. The alliance between the Colleges and University in Paris and Louvain was, in the circumstances, perhaps a rational improvement; the dethronement of the University by the Colleges in Oxford and Cambridge, without doubt, a preposterous, as an illegal, revolution.

It was the very peculiarity in the constitution of the English Colleges which disqualified them, above all similar incorporations, even for the lower offices of academical instruction, that enabled them in the end to engross the very highest; and it only requires an acquaintance with the history of the two Universities, to explain, how a revolution so improbable in itself, and so disastrous in its effects, was, by the accident of circumstances and the influence of private interest, accomplished. "Reduce," says Bacon, "things to their first institution, and observe how they have degenerated." This explanation, limited to Oxford, will be given by showing:—1°, How the students, once distributed in numerous small societies through the Halls, were at length collected into a few large communities within the Colleges; 2°, How in the Colleges, thus the penfolds of the academical flock, the Fellows frus-

* In Paris (1562) the celebrated Ramus proposed a judicious plan of reform for the Faculty of Arts. He disapproved of the lectures on philosophy established in the colleges; and was desirous of restoring these to the footing of the public courses delivered for so many centuries in the *Rue de la Fouarre*, and only suspended a few years previously. He proposed, that eight accredited professors should there teach the different branches of *mathematics, physics, and morals*; while the colleges should retain only instruction in *grammar, rhetoric, and logic*. This was to bring matters towards the very statutory constitution subverted in the English Universities by the colleges, and which, with all its imperfections, was even more complete than that proposed by Ramus, as an improvement on a collegial mechanism of tuition, perfection itself, in comparison to the intrusive system of Oxford.

trated the common right of graduates to the office of tutor; and 3^d, How the Fellow-Tutors supplanted the Professors,—how the Colleges superseded the University.

1. In the mode of teaching,—in the subjects taught,—in the forms of graduation,—and in the general mechanism of the faculties, no Universities, for a long time, resembled each other more closely than the “first and second schools of the church,” *Paris* and *Oxford*; but in the constitution and civil polity of the bodies, there were from the first considerable differences.—In *Oxford*, the University was not originally established on the distinction of Nations; though, in the sequel, the great national schism of the Northern and Southern men had almost determined a division similar to that which prevailed from the first in the other ancient Universities.*—In *Oxford*, the Chancellor and his deputy combined the powers of the Rector and the two Chancellors in *Paris*; and the inspection and control, chiefly exercised in the latter, through the distribution of the scholars of the University into Nations and Tribes, under the government of Rector, Procurators, and Deans, was in the former more especially accomplished by collecting the students into certain privileged Houses, under the control of a Principal responsible for the conduct of the members. This subordination was not indeed established at once; and the scholars at first lodged, without domestic superintendence, in the houses of the citizens. In the year 1231, we find it only ordained, by royal mandate, “that every clerk or scholar resident in *Oxford* or *Cambridge*, must subject himself to the discipline and tuition of some *Master of the Schools*,† *i. e.*, we presume, enter himself as the peculiar disciple of one or other of the actual Regents. (Wood and Fuller’s *Annals*, a. c.)—In the same year *Taxators* are established in both universities. (See Fuller, who gives that document at length.)—By the commencement of the fifteenth century, it appears, however, to have become established law, that all scholars should be members of some College, Hall, or Entry, under a responsible head, (Wood, a. 1408;) and in the

* Matters went so far, that as, in *Paris*, each of the four Nations elected its own Procurator, so, in *Oxford*, (what is not mentioned by Wood,) the two Proctors (procuratores) were necessarily chosen, one from the Northern, the other from the Southern men; also the two Scrutators, anciently distinct (?) from the Proctors.—[For *Cambridge*, see Peacock, pp. 28, 111.]

† [Fuller has “*magistro scholarum*,” in which case it should be translated “*master of scholars*.” Compare Bnleus, li. 63.]

subsequent history of the university, we find more frequent and decisive measures taken in Oxford against the *Chamberdekyns*, or scholars haunting the schools, but of no authorized house, than in Paris were ever employed against the *Martinets*.—(Wood, aa. 1413, 1422, 1512, &c.)—In the foreign Universities it was never incumbent on any, beside the students of the Faculty of Arts, to be under collegial or bursal superintendence; in the English Universities, the graduates and undergraduates of every faculty were equally required to be members of a privileged house.

By this regulation, the students were compelled to collect themselves into houses of community, variously denominated Halls, Inns, Hostles, Entries, Chambers, (Aulæ, Hospitia, Introitus, Cameræ.) These Halls were governed by peculiar statutes established by the University, by whom they were also visited and reformed; and administered by a Principal, elected by the scholars themselves, but admitted to his office by the Chancellor or his deputy, on finding caution for payment of the rent. The Halls were in general held only on lease; but by a privilege common to most Universities, houses once occupied by clerks or students could not again be resumed by the proprietor, or taken from the gown, if the rent were punctually discharged, the rate of which was quinquennially fixed by the academical Taxators. The great majority of the scholars who inhabited these Halls lived at their own expense; but the benevolent motives which, in other countries, determined the establishment of colleges and private bursæ, nowhere operated more powerfully than in England.* In a few houses, foundations were made for the support of a certain number of indigent scholars, who were incorporated as *Fellows*, (or joint participators in the endowment,) under the government of a head. But with an unenlightened liberality, these benefactions were not, as elsewhere, exclusively limited to learners, during their academical studies, and to instructors; they were not even limited

* Lipsius, after speaking of the four *Pædagogia* of Louvain, in which University he was Professor:—"Pergamus; nam et aliud Collegiorum genus est, ubi non tam docetur quam alitur juvenus, et subsidia studiorum in certos annos habet. Pulchrum inventum, et quod in Anglia magnifice usurpatur; neque enim in orbe terrarum simile esse, addam et fuisse. Magnæ illic opes et vectigalia: verbo vobis dicam? Unum *Oroniense* collegium (rem inquisivi) superet vel decem nostra." (Lovanium, l. lii. c. 5.—See also Polydori Virgilii Angl. Hist. l. v. p. 107, edit. Basil.)

to merit; while the subjection of the *Colleges* to private statutes, and their emancipation from the control of the academical authorities, gave them interests apart from those of the public, and not only disqualified them from co-operating towards the general ends of the University, but rendered them, instead of powerful aids, the worst impediments to its utility.

The Colleges, into which Commoners, or members not on the foundation, were, until a comparatively modern date, rarely admitted, (and this admission, be it noted, is to the present hour wholly optional,) remained also for many centuries few in comparison with the Halls. The latter were counted by hundreds; the former, in Oxford, even at the present day, extend only to *nineteen*.

At the commencement of the fourteenth century, the number of the Halls was about *three hundred*, (Wood, a. 1307)—the number of the secular Colleges, at the highest, only *three*.—At the commencement of the fifteenth century, when the Colleges had risen to *seven*, a Fellow of Queen's laments, that the students had diminished as the foundations had increased. (Ullerston, *Defensorium*, &c. written 1401.)—[John Major, who was incorporated, at least, in Cambridge, in his curious picture of the English Universities, records, that, at the close of the fifteenth century, there were "in each, from four to five thousand scholars, all grown up, carrying swords and bows, and, in great part, *gentry*." (De Gestis Scotorum, L. i. c. 5.)]—At the commencement of the sixteenth century, the number of Halls had fallen to *fifty-five*, (Wood, a. 1503,) while the secular Colleges had, before 1516, been multiplied to *twelve*.—The causes which had hitherto occasioned this diminution in the number of scholars, and in the number of the houses destined for their accommodation, were, among others, the plagues, by which Oxford was so frequently desolated, and the members of the University dispersed,—the civil wars of York and Lancaster,—the rise of other rival Universities in Great Britain and on the Continent,—and, finally, the sinking consideration of the scholastic philosophy.* The character which the Reformation assumed in England, co-operated, however, still more powerfully to the same result. Of itself, the schism in religion must necessarily have

* The same decline was, at this period, experienced in the continental Universities. See the article on the Epist. Obs. Vir. pp. 209, 210 of this volume, Note †.

diminished the resort of students to the University, by banishing those who did not acquiesce in the new opinions there inculcated by law; while among the reformed themselves, there arose an influential party, who viewed the academical exercises as sophistical, and many who even regarded degrees as antichristian. But in England the Reformation incidentally operated in a more peculiar manner. Unlike its fate in other countries, this religious revolution was absolutely governed by the fancies of the royal despot for the time; and so uncertain was the caprice of Henry, so contradictory the policy of his three immediate successors, that for a long time it was difficult to know what was the religion by law established for the current year, far less possible to calculate, with assurance, on what would be the statutory orthodoxy for the ensuing. At the same time, the dissolution of the monastic orders dried up one great source of academical prosperity; while the confiscation of monastic property, which was generally regarded as only a foretaste of what awaited the endowments of the Universities, and the superfluous revenues of the clergy, rendered literature and the church, during this crisis, uninviting professions, either for an ambitious, or (if disinclined to martyrdom) for a conscientious man. The effect was but too apparent; *for many years the Universities were almost literally deserted.**

* In the year 1539, the House of Convocation complains, in a letter addressed to Secretary Cromwell, that "the University, within the last five years, is greatly impaired, and the number of students diminished by one half."—In a memorable epistle, some ten years previous, to Sir Thomas More, the same complaint had been still more strenuously urged:—"Pauperes enim sumus. Olim singuli nostrum annum stipendium habuimus, aliqui à Nobilibus, nonnulli ab his qui Monasteriis præsent, plurimi à Presbyteris quibus ruri sunt sacerdotia. Nunc vero tantum abest ut in hoc perstemus, ut illi quibus debeant solitum stipendium dare recusant. Abbates enim, suos Monachos domum accersunt, Nobiles suos liberos, Presbyteri suos consanguineos: sic minuitur scholasticorum numerus, sic ruunt *Aula nostra*, sic frigescent omnes liberales disciplinae. *Collegia solum perseverant*; quæ si quid solvere cogantur, cum solum habeant quantum sufficit in victum suo scholasticorum numero, necesse erit, aut ipsa una labi, aut socios aliquot ejici. Vides jam, More, quod nobis omnibus immineat periculum. Vides ex Academia futuram non Academiam, nisi tu cantius nostram causam egeris." (Wood, a. 1539, 1540.)—In 1546, in which year the number of graduations had fallen so low as *thirteen*, the inhabited *Halls* amounted only to *eight*, and even of these several were nearly empty. (Wood, a. 1546.)—About the same time, the celebrated Walter Haddon laments, that in Cambridge "the Schools were never more solitary than at present; so notably few indeed are the students, that for every Master that reads in them there is hardly left an

The *Halls*, whose existence solely depended on the confluence of students, thus fell; and none, it is probable, would have survived the crisis, had not several chanced to be the property of certain Colleges, which had thus an interest in their support. The Halls of St Alban, St Edmund, St Mary, New Inn, Magdalen, severally belonged to Merton, Queen's, Oriel, New, and Magdalen Colleges; and Broadgates Hall, now Pembroke College, Gloucester Hall, now Worcester College, and Hert Hall, subsequently Hertford College, owed their salvation to their dependence on the foundations of Christ Church, St John's, and Exeter.—[In Cambridge the *Hostles* ended in 1540 (Fuller.) *Halls* are there Colleges, that is, incorporated foundations.]

The circumstances which occasioned the ruin of the Halls, and the dissolution of the cloisters and colleges of the monastic orders in Oxford, not only gave to the secular Colleges, which all remained, a preponderant weight in the University for the juncture; but allowed them so to extend their circuit and to increase their numbers, that they were subsequently enabled to comprehend within their walls nearly the whole of the academical population, though, previously to the sixteenth century, they appear to have rarely, if ever, admitted independent members at all.* As the students fell off, the rents of the Halls were taxed at a lower rate; and they became, at last, of so insignificant a value to the landlords, who could not apply it to other than academical purposes, that they were always willing to dispose of this fallen and falling property for the most trifling consideration. In

auditor to listen." (Lacubrationes, p. 12, edit. 1567.)—"In 1551," says the Oxford Antiquary, "the Colleges, and especially the ancient Halls, lay either waste, or were become the receptacles of poor religious people turned out of their cloisters. The present Halls, especially St Edmund's and New Inn, were void of students." (a. 1551.)—And again: "The truth is, though the whole number of students were now a thousand and fifteen, that had names in the buttery books of each house of learning, yet the greater part were absent, and had taken their last farewell." (a. 1552.)—"The two wells of learning," says Dr Bernard Gilpin in 1552,—"the two wells of learning, Oxford and Cambridge, are dried up, students decayed, of which scarce an hundred are left of a thousand; and if in seven years more they should decay so fast, there would be almost none at all; so that the devil would make a triumph, whilst there were none learned to whom to commit the flock." (Sermons preached at Court, edit. 1630, p. 23.—See also Wood, aa. 1561, 1563.—[Fuller's Cambridge, Todd's Life of Cranmer, Peacock's Statutes, &c.]

* See statute of 1489, quoted in Dr Newton's University Education, p. 9, from Darrel's transcript of the ancient statutes, preserved in the Bodleian.

Oxford, land and houses became a drug. The *old* Colleges thus extended their limits, by easy purchase, from the impoverished burghers; and the *new* Colleges, of which there were *four* established within half a century subsequent to the Reformation, and altogether *six* during the sixteenth century, were built on sites either obtained gratuitously or for an insignificant price. After this period only *one* College was founded—in 1610; and *three* of the eight Halls transmuted into Colleges, in 1610, 1702, and 1740; but of these *one* is now extinct.

These circumstances explain how the Halls declined and fell; it remains to explain, why, in the most crowded state of the University, not one subsequently was ever restored.—Before the era of their downfall, the establishment of a Hall was easy. It required only, that a few scholars should hire a house, find caution for a year's rent, and choose for Principal a graduate of respectable character. The Chancellor, or his Deputy, could not refuse to sanction the establishment. An act of usurpation abolished this facility. The general right of nomination to the Principality, and consequently to the institution, of Halls, was, "through the absolute potency he had," procured by the Earl of Leicester, Chancellor of the University, about 1570; and it is now, by statute, vested in his successors.* In surrendering this privilege to the Chancellor, the Colleges were not blind to their peculiar interest. From his situation, that magistrate was sure to be guided by their heads: no Hall has since arisen to interfere with their monopoly; and the collegial interest, thus left without a counterpoise, and concentrated in a few hands, was soon able to establish an absolute supremacy in the University.

2. By statute, the office of *Tutor* is open to all graduates. This was, however, no barrier against the encroachment of the Fellows; and the simple graduate, who should attempt to make good his right—how could he succeed?

As the Colleges only received as members those not on the foundation, for their own convenience, they could either exclude them altogether, or admit them under whatever limitations they might choose to impose. By University law, graduates were not compelled to lodge in college; they were therefore excluded as unprofitable members, to make room for under-graduates, who

* Wood's Hist. et Antiq. Univ. lib. ii. p. 339. Hist. and Antiq. of Coll. and Halls, p. 655. Statuta Aularia, sect. v.

paid tutor's fees, and as dangerous competitors, to prevent them from becoming tutors themselves. This exclusion, or the possibility of this exclusion, of itself prevented any graduate from commencing Tutor, in opposition to the interest of the foundation members. Independently of this, there were other circumstances which would have frustrated all interference with monopoly by the Fellows; but these we need not enumerate.

3. Collegial tuition engrossed by the Fellows, a more important step was to raise this collegial tuition from a subsidiary to a principal.* Could the Professorial system on which the University rested be abolished, the Tutorial system would remain the one organ of academical instruction; could the University be silently annihilated, the Colleges would succeed to its name, its privileges, and its place. This momentous—this deplorable subversion was consummated. We do not affirm that the end was ever clearly proposed, or a line of policy for its attainment ever systematically followed out. But circumstances concurred, and that instinct of self-interest which actuates *bodies* of men with the certainty of a natural law, determined, in the course of generations, a result, such as no sagacity would have anticipated as possible. *After* the accomplishment, however, a retrospect of its causes shows the event to have been natural, if not necessary.

The subversion of the University is to be traced to that very code of laws on which its constitution was finally established. The academical body is composed of graduates and under-graduates in the four faculties of Arts, Theology, Law, and Medicine; and the government of the University was of old exclusively committed to the Masters and Doctors assembled in Congregation and Convocation; Heads of Houses and collegio Fellows shared in the academical government only as they were full Graduates, and as they were Regents. The statutes ratified under the chanceryship of Laud, and by which the *legal* constitution of the University is still determined, changed this republican polity into an oligarchical. The legislation and the supreme government were still left with the full graduates, the Masters and Doctors, and the character of Fellow remained always unprivileged by law. But the Heads of Houses, if not now first raised to the rank of a pub-

* This third step in the Revolution, which from its more important character we consider last, was, however, accomplishing simultaneously with the second, of which it was, in fact, almost a condition.

lic body, were now first clothed with an authority such as rendered them henceforward the principal,—in fact, the sole administrators of the University weal.* And whereas in foreign Universities, the University governed the Colleges,—in Oxford the Colleges were enthroned the governors of the University. The Vice-Chancellor, (now also necessarily a *College Head*.) the Heads of

* Anciently the right of previous discussion belonged to the House of Regency or *Congregation*. The omnipotent Earl of Leicester, to confirm his hold over the University, and in spite of considerable opposition, constrained the Masters to surrender this function to a more limited and manageable body, composed of the Vice-Chancellor, *Doctors*, Heads, (for the first time recognised as a public body) and Proctors (Wood *a.* 1569). [It does not appear that the Heads and Doctors hereby obtained the *absolute initiative*. They, as previously the Congregation, had only the right of prior deliberation, but not the right of preventing the introduction of a measure into the academical legislature. (Wood *ii.* p. 167, sq.)] Land, desirous of still farther concentrating the government, and in order to exercise himself a more absolute control, constituted the *Hebdomadal Meeting* of his very humble servants the *Heads*; and to frustrate opposition from the House of Convocation to this momentous and unconstitutional change by precluding opposition, he forced the innovation on the University through *royal statute*.—The Cambridge *Caput*,—*Caput Senatus*,—whose powers were virtually first instituted by the Elizabethan statutes, forms a curious pendant to the Oxford Hebdomadal Meeting; and in general, the history of the two Universities is a history of the same illegal revolution, accomplished by the same influence, under circumstances similar, but not the same. [The *Caput* comprises six members, to wit, the Vice-Chancellor, the representatives of the three higher faculties of Theology, Civil Law, and Physic, and of the two Houses, the Regent and Non-Regent. It originates nothing, but each member has a *reto* effectual during the academical year. "There is no part of the constitution of the University" (says Dr Peacock, in his *Observations on the Cambridge Statutes*, 1841, p. 48) "so useful and necessary for many purposes, which has operated *more injuriously to its interests, by the discouragements and obstacles which it has opposed to the consideration and enactment of measures of rational improvement*." Again (says the same able and candid writer, p. 23) "the statutes of Elizabeth, by making the existence of the authority of this body permanent (during an entire academical year), and by the mode of its appointment, *placed the whole legislative powers of the University under the control of the Heads of Houses*." How then can Dr Whewell (Cambridge Education, § 382) state, that "the Heads of Colleges have no special share in the legislation of the University, except as advisers of the Vice-Chancellor?" Nor can this be reconciled with the authority recognised as belonging to the Interpretations and Decrees of the Heads of Colleges; these are regarded as of *statutory* obligation, and *sworn* to as such. See the learned Serjeant Miller's Account of the University of Cambridge, (cc. 3, 4, 6,) who commemorates these "*benign interpretations*" of the Reverend Heads by which *white* is coolly expounded to mean *black*, &c.]

Houses, and the two Proctors, were constituted into a body, and the members constrained to regular attendance on an ordinary weekly meeting. To this body was committed, as their *especial duty*, the care of "*inquiring into, and taking counsel for, the observance of the statutes and customs of the University*; and if there be aught touching the good government, the *scholastic improvement*, the honour and usefulness of the University, which a majority of them may think worthy of deliberation, let them have power to deliberate thereupon, to the end that, after this their deliberation, the same may be proposed more advisedly in the Venerable House of Congregation, and then with mature counsel ratified in the Venerable House of Convocation." (T. xiii.) Thus, no proposal could be submitted to the houses of Congregation or Convocation, unless it had been *previously discussed and sanctioned by the "Hebdomadal Meeting*;" and through this preliminary negative,* the most absolute control was accorded to the Heads of Houses over the proceedings of the University. By their permission, every statute might be violated, and every custom fall into desuetude: without their permission, no measure of reform, or improvement, or discipline, however necessary, could be initiated, or even mentioned.

A body constituted and authorized like the Hebdomadal Meeting, could only be rationally expected to discharge its trust: 1°, if its members were subjected to a direct and concentrated responsibility; and 2°, if their public duties were identical with their private interests. The Hebdomadal Meeting acted under neither of these conditions.

In regard to the *first*, this body was placed under the review of no superior authority either for what it did, or for what it did not, perform; and the responsibility to public opinion was distributed among too many to have any influence on their collective acts. "Corporations never blush."

In regard to the *second*, so far wore the interests and duties of the Heads from being coincident, that they were diametrically opposed. Their public obligations bound them to maintain and improve the system of University education, of which the *Profes-*

* And as if this preliminary negative were not enough, there was conceded by the same statutes to the single college head who holds for the time the office of Vice-Chancellor, an absolute *veto* upon all proceedings in the Houses of Congregation and Convocation themselves. In *Cambridge* a preliminary *veto* is enjoyed by every member of the *Caput*.

sors were the organs; but this system their private advantage, both as individuals and as representing the collegial interest, prompted them to deteriorate and undermine.

When the *Corpus Statutorum* was ratified, there existed *two* opposite influences in the University, either of which might have pretended to the chief magistracy,—the *Heads of Houses* and the *Professors*. The establishment of the Hebdomadal Meeting by Laud, gave the former a decisive advantage, which they were not slack in employing against their rivals.

In their individual capacity, the Heads, samples of the same bran with the Fellows, from whom and by whom they were elected, owed in general their elevation to accidental circumstances; and their influence, or rather that of their situation, was confined to the members of their private communities. The Professors, the *élite* of the University, and even (of old) not unfrequently called for their celebrity from other schools and countries, were ostensibly chosen exclusively from merit; and their position enabled them to establish, by ability and zeal, a paramount ascendancy over the whole academical youth.

As men, in general, of merely ordinary acquirements,—holding in their collegial capacity only an accidental character in the University,—and elevated, simply in quality of that character, by an act of arbitrary power to an unconstitutional pre-eminence; the Heads were, not unnaturally, jealous of the contrast exhibited to themselves by a body like the Professors, who, as the principal organs, deserved to constitute in Oxford, what in other Universities they actually did, its representatives and governors. Their only hope was in the weakness of their rivals. It was easily perceived, that in proportion as the professorial system of instruction was improved, the influence of the professorial body would be increased; and the Heads were conscious, that if that system were ever organised as it ought to be, it would no longer be possible for them to maintain their own factitious and absurd omnipotence in the academical polity.

Another consideration also co-operated. A temporary decline in the University had occasioned the desertion of the Halls; a few Houses had succeeded in collecting within their walls the whole academical population; and the heads of these few Houses had now obtained a preponderant influence in the University. Power is sweet; and its depositaries were naturally averse from any measure which threatened to diminish their consequence, by

multiplying their numbers. The existing Colleges and Halls could afford accommodation to a very limited complement of students. The exclusive privileges attached in England to an Oxford or Cambridge degree in Law, in Medicine, and above all, in the Church, filled the Colleges, independently of any merit in the academical teachers. But were the University restored to its ancient fame,—did students again flock to Oxford, as they flocked to Leyden and Padua, the Halls must again be called into existence, or the system of domestic superintendence be abandoned or relaxed. The interest of the Heads was thus directly opposed to the celebrity of the professorial body, both in itself, and in its consequences. The University must not, at best, transcend the standard of a decent mediocrity. Every thing, in fact, that tended to keep the confluence of students within the existing means of accommodation, found favour with these oligarchs. Subscription to the Thirty-nine Articles, even at matriculation, imposed by the Calvinist Leicester, was among the few statutes not subsequently violated by the Arminian Heads; the numbers of poor scholars formerly supported in all the Colleges were gradually discarded;* the expenses incident on a University education kept graduated to the convenient pitch; and residence, after the first degree, for this and other reasons, dispensed with.

At the same time, as representatives of the Collegial interest, the Heads were naturally indisposed to discharge their duty towards the University. In proportion as the public or professorial education was improved, would it be difficult for the private or tutorial to maintain its relative importance as a subsidiary. The Collegial Tuition must either keep pace with the University Prelections, or it must fall into contempt and desuetude. The student accustomed to a high standard in "the Schools," would pay little deference to a low standard in the College. It would now be necessary to admit Tutors exclusively

* Before the decline of the Halls, academical education cost nothing, and the poor student could select a society and house proportioned to his means, down even to the begging Logicians of Aristotle's Hall. The Colleges could hardly have prevented the restoration of the Halls, had they not, for a considerable time, supplied that accommodation to the indigent scholars to which the country had been accustomed. From the "Exact Account of the whole Number of Scholars and Students in the University of Oxford, taken anno 1612," it appears that about *four hundred and fifty poor scholars and servants* then received gratuitous, or almost gratuitous, education and support in the Colleges. How many do so now?

from merit; the Fellows, no longer able to vindicate their monopoly against the other graduates, would, in an unexclusive competition, sink to their proper level, even in their own houses; while, in the University, the Collegial influence, in general, would be degraded from the arbitrary pre-eminence to which accident had raised it.

In these circumstances, it would have been quite as reasonable to expect that the Heads of Colleges should commit suicide to humour their enemies, as that they should prove the faithful guardians and the zealous promoters of the Professorial system. On the contrary, by confiding this duty to that interest, it was in fact decreed, that the Professorial system should, by its appointed guardians, be discouraged,—corrupted,—depressed,—and, if not utterly extinguished, reduced to such a state of inefficiency and contempt, as would leave it only useful as a foil to relieve the imperfections of the Tutorial. And so it happened. The professorial system, though still imperfect, could without difficulty have been carried to unlimited perfection; but the Heads, far from consenting to its melioration, fostered its defects, in order to precipitate its fall.

In Oxford, as originally in all other Universities, salaried teachers or Professors were bound to deliver their prelections *gratis*. But it was always found that, under this arrangement, the Professor did as little as possible, while the student undervalued what cost him nothing. "*Gratis et frustra*." Universities in general, therefore, corrected this defect. The interest of the Professor was made subservient to his diligence, by sanctioning, or winking at, his acceptance of voluntary gifts or Honoraria from his auditors; which, in most Universities, were at length converted into exigible fees. In Oxford, this simple expedient was, of course, not permitted by the Heads: and what were the consequences? The Hebdomadal Meeting had the charge of watching over the due observance of the Statutes. By statute and under penalty, the Professors were bound to a regular delivery of their courses; by statute and under penalty, the Students were bound to a regular attendance in the public classes; and by statute, by oath, but *not under penalty*, the Heads were bound to see that both parties duly performed their several obligations. It is evident, that the Heads were here the keystone of the arch. If they relaxed in their censorship, the Professors, finding it no longer necessary to lecture regularly, and no longer certain of a regular audience,

would, or elong, desist from lecturing at all ; * while the Students, finding attendance in their classes no longer compulsory, and no longer sure of a lecture when they did attend, would soon cease to frequent the "*Schools*" altogether. The Heads had only to violate their duties, by neglecting the charge especially intrusted to them, and the downfall of the obnoxious system was inevitable. And this they did.

At the same time, other accidental defects in the Professorial system, as constituted in Oxford,—the continuance of which was guaranteed by the body sworn "to the scholastic improvement of the University,"—co-operated also to the same result.

Fees not permitted, the Salaries which made up the whole emoluments attached to the different chairs were commonly too small to afford an independent, far less an honourable livelihood. They could therefore only be objects of ambition, as honorary appointments, or supplemental aids. This limited the candidates to those who had otherwise a competent income ; and consequently threw them, in general, into the hands of the members of the collegial foundations, *i. e.* of a class of men on whose capacity or good intention to render the professorships efficient, there could be no rational dependence.

Some, also, of the public lectureships were temporary ; these were certain to be negligently filled, and negligently taught.

Another circumstance likewise concurred in reducing the standard of professorial competence. The power of election, never intrusted to the safest hands, was in general even confided to those interested in frustrating its end. The appointment was often directly, and almost always indirectly, determined by college influence. In exclusive possession of the tutorial office, and non-residence *as yet* only permitted to independent graduates, the Fellows, in conjunction with the Heads, came to constitute the great proportion of the resident members of Convocation and Congregation ; and therefore, except in cases of general interest, the elections belonging to the public bodies were sure to be decided by them.†

* How well disposed the salaried readers always were to convert their chairs into sluicures, may be seen in Wood, aa. 1581, 1582, 1584, 1589, 1590, 1594, 1596, 1608, &c.

† Since writing the above, we notice a curious confirmation in *Terra-Filius*. This work appeared in 1721, at the very crisis when the Collegial interest was accomplishing its victory. The statements it contains were

Nor was it possible to raise the Tutorial system from its state of relative subordination, without an *absolute subversion* of the Professorial. The Tutor could not extend his discipline over the bachelor in arts, for every bachelor was by law entitled to commence Tutor himself. But the colleges could not succeed in vindicating their monopoly even of the *inferior* branches of education, unless they were able also to incapacitate the University from affording instruction in the *superior*. For if the public lectures were allowed to continue in the higher faculties, and in the higher department of the lowest, it would be found impossible to justify their suppression in that particular department, which alone the College Fellows could pretend to teach. At the same time, if attendance on the Professorial Courses remained necessary for degrees above bachelor in arts, a multitude of graduates, all competent to the Tutorial office, would in consequence continue domiciled in the University, and the Fellows' usurpation of that function it would be found impossible to maintain. With the Colleges and Fellows it was, therefore, *all or nothing*. If they were not to continue, as they had been, mere accessaries to the University, it behoved to *quash the whole public lectures, and to dispense with residence after the elementary degree*. Thus the Heads of Houses

never, we believe, contradicted; and though the following representation may be in some points exaggerated, the reader can easily recognise its substantial truth. Speaking of the Professors:—"I have known a profligate debauchee chosen Professor of Moral Philosophy; and a fellow, who never looked upon the stars soberly in his life, Professor of Astronomy: we have had History Professors, who never read any thing to qualify them for it, but Tom Thumb, Jack the Giant-killer, Don Bellianis of Greece, and such like records: we have had likewise numberless Professors of Greek, Hebrew, and Arabic, who scarce understood their mother tongue; and not long ago, a famous gamester and stock-jobber was elected Margaret Professor of Divinity; so great, it seems, is the analogy between dusting cushions and shaking of elbows, or between squandering away of estates and saving of souls." And in a letter, from an under-graduate of Wadham:—"Now, it is monstrous, that notwithstanding these *public lectures* are so much neglected, we are all of us, when we take our degrees, charged with and punished for non-appearance at the reading of many of them; a formal dispensation is read by our respective deans, at the time our grace is proposed, for our non-appearance at these lectures, [N. B.] *and it is with difficulty that some grave ones of the Congregation are induced to grant it*. Strange order! that each lecturer should have his fifty, his hundred, or two hundred pounds a-year for doing nothing; and that we (the young fry) should be obliged to pay money for not hearing such lectures as were never read, nor ever composed." (No. X.)

easily effected. As the irresponsible guardians of the University statutes, they violated their trust, by allowing the *Professors* to neglect their statutory duty, and empty standing to be taken in lieu of the course of academical study, which it legally implied.

The Professorial system was thus from the *principal* and *necessary*, degraded into the *subordinate* and *superfluous*; the Tutorial elevated, with all its additional imperfection, from the *subsidiary*, into the *one exclusive* instrument of education. In establishing the ascendancy of the collegial bodies, it mattered not that the extensive cycle of academical instruction was contracted to the narrow capacity of a Fellow-Tutor;—that the University was annihilated, or reduced to half a faculty,—of one teachership,—which every “graduated dunce” might confidently undertake. The great interests of the nation, of the church, and of the professions, were sacrificed to the paltry ends of a few contemptible corporations; and the privileges by law accorded to the *public University* of Oxford, as the authorised organ of national education, were by its perfidious governors furtively transferred to the unauthorised absurdities of their *private*—of their *domestic* discipline.

That the representatives of the Collegial bodies, as constituting the Hebdomadal Meeting, were the authors of this radical subversion of the establishment of which they were the protectors,—that the greatest importance was attached by them to its accomplishment,—and, at the same time, that they were fully conscious of sacrificing the interests of the University and public to a private job;—all this is manifested by the fact, that the Heads of Houses, rather than expose the college usurpations to a discussion by the academical and civil legislatures, not only submitted to the disgrace of leaving their smuggled system of education without a legal sanction, but actually tolerated the reproach of thus converting the great seminary of the English Church into a *school of perjury*, without, as far as we know, an effort either at vindication or amendment. This grievous charge, though frequently advanced both by the friends and enemies of the establishment, we mention with regret; we do not see how it can be rebutted, but shall be truly gratified if it can. Let us inquire.

At matriculation, every member of the University of Oxford solemnly swears to an observance of the academical statutes, of which he receives a copy of the *Excerpta*, that he may be unable to urge the plea of ignorance for their violation; and at every

successive step of graduation, the candidate not only repeats this comprehensive oath, but after hearing read, by the senior Proctor, a statutory recapitulation of the statutes which prescribe the various public courses to be attended, and the various public exercises to be performed, as the conditions necessary for the degree, specially makes oath, "that having heard what was thus read, and having, within three days, diligently read or heard read, [the other statutes having reference to the degree he is about to take,] moreover the seventh section of the sixth title, *that he has performed all that they require, those particulars excepted for which he has received a dispensation.*" (Stat. T. ii. § 3, T. ix. S. vi. § 1—3.) The words in square brackets are omitted in the re-enactment of 1808. (Add. T. ix. § 3.)

Now, in these circumstances, does it not follow that every member of the University commits perjury, who *either* does not observe the statutory enactments, *or* does not receive a dispensation for their non-observance?

Under the *former* alternative, false swearing is manifestly inevitable. Of the University laws, it is much easier to enumerate these which are not violated than these which are; and tho' "*Excerpta Statutorum*," which the intrant receives at matriculation, far from enabling him to prove faithful to his oath, serves only to show him the extent of the perjury, which, if he do not fly the University, he must unavoidably incur. Suffice it to say, that almost the only statutes now observed, are those which regulate matters wholly accidental to the essential ends of the institution,—as the civil polity of the corporation, or circumstances of mere form and ceremonial. The *whole* statutes, on the contrary, that constitute the being and the well-being of the University, as an establishment of education in general, and in particular, of education in the three learned professions,—these fundamental statutes are, one and all, absolutely reduced to a dead letter. And why? Because *they establish the University on the system of Professorial instruction*. The fact is too notorious to be contradicted, that whilst every statute which comports with the private interest of the College corporations is religiously enforced, every statute intended to insure the public utility of the University, but incompatible with their monopoly, is unscrupulously violated.

The *latter* alternative remains; but does Dispensation afford a postern of escape?—The statutes bestow this power exclusively on the Houses of Congregation and of Convocation, and the limits

of "*Dispensable*" and of "*Indispensable Matter*" are anxiously and minutely determined. Of itself, the very fact that there was aught indispensable in the system at all, might satisfy us, without farther inquiry, that at least the one essential part of its organization, through which the University, by law, accomplishes the purposes of its institution, could not be dispensed with; for this would be nothing else than a dispensation of the University itself. But let us inquire further:—

The original statute (Corp. St. T. ix. S. iv. § 2), determining the Dispensable Matter competent to the House of Congregation, was re-enacted, with some unimportant omissions, in 1801 and 1808. (Add. pp. 136, 188.) By these statutes there is allowed to that House the power of dispensation in twenty-three specified cases, of which the fourth—"Pro minus diligenti publicorum Lectorum auditione"—need alone be mentioned, as showing, by the only case in point, how limited is the power committed to Congregation, of dispensing with the essential business of the University. The students were unconditionally bound, by oath and statute, to a regular attendance on the different classes; and a dispensation for the cause of "*a just impediment*," is here allowed to qualify, on equitable grounds, the rigour of the law. It will not be contended, that a power of dispensation allowed for the *not altogether diligent* attendance on the public readers, was meant by the legislatures to concede a power of dispensing with all attendance on the professorial courses; nay, of absolutely dispensing with these courses themselves.

There has been no subsequent enactment, modifying the Laudian statutes touching the dispensing power of Convocation. This house, though possessing the right of rescinding old and of ratifying new laws, felt it necessary to restrict its prerogative of lightly suspending their application in particular cases, in order to terminate "*the too great license of dispensation, which had heretofore wrought grievous detriment to the University.*" (Corp. St. T. x. S. ii. § 5.) Accordingly, under the head of *Dispensable Matter*, there is to be found nothing to warrant the supposition, that power is left with Convocation of dispensing with the regular lectures of all or any of its professors, or with attendance on these lectures by all or any of its scholars. On the contrary, it is only permitted, at the utmost, to give dispensation to an ordinary (or public) reader, who had been forced by necessity to deliver his lecture, through a substitute, without the regular

authorization. (T. x. S. ii. § 4.)—Again, under the head of *Indispensable Matter*, those cases are enumerated in which the indulgence had formerly been abused. All defect of standing, (standing at that time meant *length of attendance on the professional lectures*), all non-performance of exercise, either before or after graduation, are declared henceforward indispensable. But if the less important requisites for a degree, and in which a relaxation had previously been sometimes tolerated, are now rendered imperative; *multo majus*, must the conditions of paramount importance, such as delivery of, and attendance on, the public courses, be held as such,—conditions, a dispensation for which having never heretofore been asked, or granted, or conceived possible, a prospective prohibition of such abuse could never, by the legislature, be imagined necessary. At the same time, it is declared, that hereafter no alteration is to be attempted of the rules, by which founders, with consent of the University, had determined the duties of the chairs by them endowed; and these rules, as thus modified and confirmed, constitute a great proportion of the statutes by which the system of public lectures is regulated. (T. x. S. ii. § 5.)—Under both heads, a general power is, indeed, left to the Chancellor, of allowing the Hebdomadal Meeting to propose a dispensation; but this only “*from some necessary and very urgent cause*,” and “*in cases which are not repugnant to academical discipline*.” We do not happen to know, and cannot at the moment obtain the information, whether there now is, or is not, a form of dispensation passed in Convocation for the non-delivery of their lectures by the public readers, and for the non-attendance on these lectures by the students. Nor is the fact of the smallest consequence to the question. For either the statutes are violated without a dispensation, or a dispensation is obtained in violation of the statutes. [See next following article.]

But as there is nothing in the terms of these statutes, however casuistically interpreted, to afford a colour for the monstrous supposition, that it was the intention of the legislature to leave to either house the power of arbitrarily suspending the whole mechanism of education established by law, that is, of dispensing with the University itself, whereas their whole tenor is only significant as proving the reverse; let us now look at the “*Epinomis, or explanation of the oath taken by all, to observe the statutes of the University, as to what extent it is to be held binding*.”

in which the intention of the legislature, in relation to the matter at issue, is unequivocally declared. This important article, intended to guard against all sophistical misconstruction of the nature and extent of the obligation incurred by this oath, though it has completely failed in preventing its violation, renders, at least, all palliation impossible.

It is here declared, that all who are sworn who wrest the terms of the statutes to a sense *different from that intended by the legislature*, or take the oath under any mental reservation. Consequently, those are perjured : 1°, *who aver they have performed*, or do believe, *what they have not performed*, or do not believe ; 2°, they who, violating a statute, do not submit to the penalty attached to that violation ; 3°, they who proceed in their degrees without a dispensation for the non-performance of dispensable conditions, *but much more they who thus proceed without actually performing those prerequisites which are indispensable*. “As to other delicts,” (we translate literally,) “if there be no contempt, no gross and obstinate negligence of the statutes and their penalties ; and if the delinquents have submitted to the penalties sanctioned by the statutes, they are not to be held guilty of violating the religious obligation of their oath. Finally, as the reverence due to their character exempts the MAGISTRATES OF THE UNIVERSITY from the common penalties of other transgressors, *so on them there is incumbent a stronger conscientious obligation ; inasmuch as they are bound not only to the faithful discharge of their own duties, but likewise diligently to take care that all others in like manner perform theirs*. Not, however, that it is intended that every failure in their duties should at once involve them in the crime of perjury. *But since the keeping and guardianship of the Statutes is intrusted to their fidelity, if (may it never happen !)* through their negligence or sloth, they suffer any statutes whatever to fall into desuetude, and silently, as it were, to be abrogated, in that event we DECREE THEM GUILTY OF BROKEN FAITH AND OF PERJURY.” What would these legislators have said, could they have foreseen that these “Reverend Magistrates of the University” should “silently abrogate” every *fundamental statute* in the code of which they were the appointed—the sworn guardians ?

It must, as we observed, have been powerful motives which could induce the Heads of Houses, originally to incur, or subsequently to tolerate, such opprobrium for themselves and the Uni-

versity; nor can any conceivable motive be assigned for either, except that these representatives of the collegial interest were fully aware that the intrusive system was not one for which a sanction could be hoped from the academical and civil legislatures, while, at the same time, it was too advantageous for themselves not to be quietly perpetuated, even at such a price.

We do not see how the Heads could throw off the charge of "broken faith and perjury," incurred by their "silent abrogation" of the *University* statutes, even allowing them the plea which some low moralists have advanced in extenuation of the perjury committed by the non-observance of certain *College* statutes.*

For, in the *first* place, this plea supposes that the observance of the violated statute is *manifestly* inconsistent with the end of the institution, towards which it only constituted a mean. Here, however, it cannot be alleged that the statutory, or Professorial system, is manifestly inconsistent with the ends of a University; seeing that all Universities, except the English, employ that instrument exclusively, and as the best; and that Oxford, under her new Tutorial dispensation, has never manifestly been the exemplar of academical institutions.

In the *second* place, even admitting the Professorial system to be notoriously inconvenient, still the plea supposes that the inconvenience has arisen from a change of circumstances unknown to the lawgiver, and subsequent to the enactment. But in the present case, the only change (from the maturer age of the student,) has been to enhance the importance of the Professorial method, and to diminish the expediency of the Tutorial.

But in the *third* place, such a plea is, in the present instance, incompetent altogether. This is not the case of a private foundation, where the lawgiver is defunct. Here the institution is public,—the lawgiver perpetual; and he might at every moment have been interrogated concerning the repeal or observance of his statutes. That lawgiver is the House of Convocation. The Heads in the Hebdomadal Meeting are constituted the special guardians of the academical statutes and their observance; and, as we formerly explained, except through them, no measure can

* PALEY, Principles of Moral and Political Philosophy, b. ii. c. 21. His arguments would justify a repeal of such statutes by public authority, never their violation by private and interested parties, after swearing to their observance.

be proposed in Convocation for instituting new laws, or for rendering old laws available. They have a ministerial, but no legislative function. Now the statutory system of public teaching fell into desuetude, either *in opposition to their wishes and endeavours*, or *with their concurrence*.

The *former* alternative is impossible. Supposing even the means of enforcing the observance of the statutes to have been found incompetent, it was their duty both to the university and to themselves, to have applied to the legislative body for power sufficient to enable them to discharge their trust, or to be relieved of its responsibility. By law, they are declared morally and religiously responsible for the due observance of the statutes. No body of men would, without inducement, sit down under the brand of "violated faith and perjury." Now this inducement must have been either a *public*, or a *private* advantage. Public it could not have been. There is no imaginable reason, if the Professorial system were found absolutely or comparatively useless, why its abolition or degradation should not have been openly moved in Convocation; and why, if the Tutorial system were calculated to accomplish all the ends of academical instruction, it should either at first have crept to its ascendancy through perjury and treason, or, after approving its sufficiency, have still only enjoyed its monopoly by precarious toleration, and never demanded its ratification on the ground of public utility. If the new system were superior to the old, why hesitate to proclaim that the academical instruments were changed? If Oxford were now singular in perfection, why delusively pretend that her methods were still those of universities in general? It was only necessary that the Heads either brought themselves, or allowed to be brought by others, a measure into Convocation to repeal the obsolete and rude, and to legitimate the actual and improved.

But as the Heads never consented that this anomalous state of gratuitous perjury and idle imposition should cease, we are driven to the *other* alternative of supposing, that in the transition from the statutory to the illegal, the change was originally determined, and subsequently maintained, not because the surreptitious system was conducive to the public ends of the University, but because it was expedient for the interest of those private corporations, by whom this venerable establishment has been so long latterly administered. The Collegial bodies and their Heads were not ignorant of its imperfections, and too prudent to hazard their discussion.

They were not to be informed that their policy was to enjoy what they had obtained, in thankfulness and silence; not to risk the loss of the possession by an attempt to found it upon right. They could not but be conscious, that should they even succeed in obtaining—what was hardly to be expected—a ratification of their usurpations from an academical legislature, educated under their auspices, and strongly biassed by their influence, they need never expect that the State would tolerate, *that those exclusive privileges conceded to her graduates, when Oxford was a University in which all the Faculties were fully and competently taught, should be continued to her graduates, when Oxford no longer afforded the public instruction necessary for a degree in any Faculty at all.* The very agitation of the subject would have been a signal for the horrors of a Visitation.

The strictures, which a conviction of their truth, and our interest in the honour and utility of this venerable school, have constrained us to make on the conduct of the Hebdomadal Meeting, we mainly apply to the Heads of Houses of a former generation, and even to them solely in their corporate capacity. Of the late and present members of this body, we are happy to acknowledge, that, during the last twenty-five years, so great an improvement has been effected through their influence, that in some essential points Oxford may, not unworthily, be proposed as a pattern to most other universities. But this improvement, though important, is partial, and can only receive its adequate development by a return to the *statutory combination of the Professorial and Tutorial systems.* That this combination is implied in the constitution of a perfect university, is even acknowledged by the most intelligent individuals of the Collegial interest,—by the ablest champions of the tutorial discipline: * such an opinion cannot, however, be expected to induce a majority of the collegial bodies voluntarily to surrender the monopoly they have so long enjoyed, and to descend to a subordinate situation, after having occupied a principal. All experience proves, that universities, like other corporations, can only be reformed from without. “Voilà,” says Crevier, speaking of the last attempt at a reform of the University of Paris by itself—“voilà à quoi aboutirent tant de projets, tant de délibérations: et cette nouvelle tentative, aussi infructueuse que les précédentes, rend de plus en plus visible la maxime

* Coplestone's Reply to the Calumnies, &c. p. 146.

claire en soi, que les compagnies ne se réforment point elles-mêmes, et qu'une entreprise de réforme où n'intervient point une autorité supérieure, est une entreprise manquée." * A Committee of Visitation has lately terminated its labours on the Scottish Universities; we should anticipate a more important result from a similar, and far more necessary, inquiry into the corruptions of those of England.

* Histoire de l'Université de Paris, t. vi. p. 370.

V.—ON THE STATE OF THE ENGLISH
UNIVERSITIES,

WITH MORE ESPECIAL REFERENCE TO OXFORD.

(SUPPLEMENTAL.)

(DECEMBER, 1831.)

The Legality of the present Academical System of the University of Oxford, asserted against the new Calumnies of the Edinburgh Review. By a MEMBER OF CONVOCATION. 8vo. Oxford: 1831.

IN a recent Number we took occasion to signalize one of the most remarkable abuses upon record. We allude to our article on the English Universities. Even in this country, hitherto the paradise of jobs, the lawless usurpation of which these venerable establishments have been the victims, from the magnitude of the evil, and the whole character of the circumstances under which it was consummated, stands pre-eminent and alone. With more immediate reference to Oxford, (though Cambridge is not behind hand in the delict,) it is distinguished, at once, for the extent to which the most important interests of the public have been sacrificed to private advantage,—for the unhallowed disregard, shewn in its accomplishment, of every moral and religious bond,—for the sacred character of the agents through whom the unholy treason was perpetrated,—for the systematic perjury which it has naturalized in this great seminary of religious education,—for the apathy, wherewith the injustice has been tolerated by the State, the impiety by the Church,*—nay, even for the unac-

* The Archbishop of Canterbury possesses, *jure metropolitico*, to say nothing of the inferior diocesan, the right of ordinary visitation over the two

quaintance, so universally manifested, with so flagrant a corruption. The history of the University of Oxford demonstrates by a memorable example:—That bodies of men will unscrupulously carry through, what individuals would blush even to attempt; and that the clerical profession, the obligation of a trust, the sanctity of oaths, afford no security for the integrity of functionaries, able with impunity to violate their public duty, and with a private interest in its violation.

In being the first to denounce the illegality of the state of this great national school, and, in particular, to expose the heads of the Collegial interest as those by whom, and for whose ends, this calamitous revolution was effected, we were profoundly conscious of the gravity of the charge, and of the responsibility which we incurred in making it. Nothing, indeed, could have engaged us in the cause, but the firmest conviction of the punctual accuracy of our statement,—and the strong, but disinterested, wish to co-operate in restoring this noble University to its natural pre-eminence, by relieving it from the vampiro oppression, under which it has pined so long in almost lifeless exhaustion.

But though without anxiety about attack, we should certainly have been surprised had there been no attempt at refutation. It is the remark of Hobbes:—"If this proposition—the three angles of a triangle are equal to two right angles—had been opposed to the advantage of those in authority, it would long ago have been denounced as heresy or high treason." The opinions of men in general are only the lackeys of their interest; and with so many so deeply interested in its support, the present profitable system of corruption could not, in Oxford, find any scarcity of, at least, willing champions. At the same time it is always better, in speaking to the many, to say something, should it signify nothing, than to be found to say nothing at all. Add to this, that the partisans of the actual system had of late years shown themselves so prompt in repelling the most trivial objurgations, that silence, when the authors of that system were accused of the weightiest offences, and the system itself articulately displayed as

Universities, in all matters of heresy, schism, and, in general, of religious concernment. English Bishops have been always anti-reformers; and in the present instance they may have closed their eyes on its perjury, by finding that the illegal system, in bestowing on the College Fellows the monopoly of education, bestowed it exclusively on the Church. Before this usurpation the clergy only had their share of the University.

one glaring scheme of usurpation and absurdity, would have been tantamount to an overt confession of the allegation itself. If our incidental repetition of the old bye-word of "*Oxonian Latin*"* brought down on us more than one indignant refutation of the "calumny;" our formal charge of *Illegality, Treason, Perjury, and Corruption* could not remain unanswered, unless those who yesterday were so sensitive to the literary glory of Oxford, were to-day wholly careless not only of that, but even of its moral and religious respectability;—"Diligentius studentes loqui quam vivere."

But how was an answer to be made? This was either *easy* or *impossible*. If our statements were false, they could be at once triumphantly refuted, by contrasting them with a few short extracts from the Statutes; and the favourable opinion of a respectable Lawyer would have carried as general a persuasion of the legality of the actual system, as the want of it is sure to carry of its illegality. In these circumstances, satisfied that no lawyer could be found to pledge his reputation in support of the legality of so unambiguous a violation of every statute, and that, without such a professional opinion, every attempt, even at a plausible reply, would be necessarily futile; we hardly hoped that the advocates of the present order of things would be so ill-advised as to attempt a defence, which could only terminate in corroborating the charge. We attributed to them a more wily tactic. The sequel of our discussion, (in which we proposed to consider in detail the comparative merits of the statutory and illegal systems, and to suggest some means of again elevating the University to what it ought to be,) might be expected to afford a wider field for controversy; and we anticipated, that the objection of *illegality*, now allowed to pass, would be ultimately slurred

* JULIUS CÆSAR SCALIGER *De Subtilitate*, Exerc. xvi. 2—"Loquar ergo in eo more, *barbare et ab Oxonio*;" and honest Anthony admits that "*Oxonienſis loquendi mos*" was thus proverbially used.—Speaking of Scaliger and Oxford, we may notice that, from a passage in the same work, (Exerc. xcix.) it clearly appears that this tranſcendent genius may be claimed by Oxford, as among her ſons. "*Lutetia aut Oxoniæ, modica induti togula, hyemes non ſolum ferre, ſed etiam frangere didicimus.*" The importance of this curious diſcovery, unſuſpected by Sclopſius, and contradictory of what Joſeph Scaliger and all others have aſſerted and believed of the early life of his father, will be appreciated by thoſe intereſted in the myſterious biography of this (prince or impoſtor) illuſtrious philoſopher and critic.

over, a reply to our whole argument being pretended under covert of answering a part.

We were agreeably mistaken. The bulky pamphlet at the head of this article has recently appeared; and we have to tender our best acknowledgments to its author, for the aid he has so effectually afforded against the cause he intentionally supports. This "*Assertion* (the word is happily appropriate!) *of the Legality of the present academical system of Oxford*" manifests two things:—How unanswerable are our statements, when the opponent, who comes forward professing to refute the "new and unheard-of calumny," never once ventures to look them in the face; and, How intensely felt by the Collegial interest must be the necessity of a reply,—a reply at all hazards,—when a Member of the Venerable House of Convocation could stoop to such an attempt at delusion, as the present semblance of an answer exhibits.

It may sound like paradox to say, that this pamphlet is no answer to our paper, and yet, that we are bound to accord it a reply. But so it is. Considered merely in reference to the points maintained by us, we have no interest in disproving its statements: for it is, in truth, no more a rejoinder to our reasoning, than to the *Principia* of Newton. Nay less. For, in fact, our whole proof of the illegality of the present order of things in Oxford, and of the treachery of the College Heads, would be invalidated, were the single proposition, which our pretended antagonist so ostentatiously vindicates against us, not accurately true. We admit, that if we held what he refutes as ours, our positions would be not only false, but foolish; nay, that if we had not established the very converse, as the beginning, middle, and end of our whole argument, this argument would not only be unworthy of an elaborate answer, but of any serious consideration at all. It is a vulgar artifice to misrepresent an adversary, to gain the appearance of refuting him; but never was this contemptible manœuvre so impudently and systematically practised. In so far as it has any reference to our reasoning, the whole pamphlet is, from first to last, just a deliberate reversal of all our statements. Its sophistry (the word is too respectable) is not an *ignoratio*, but a *mutatio, elenchii*; of which the lofty aim is to impose on the simplicity of those readers who may rely on the voracity of "A Member of Convocation," and are unacquainted with the paper, the arguments of which he professes to state and to refute.

Under so creditable a name, never was there a more discreditable performance; for we are unable even to compliment the author's intentions at the expense of his talent. The plain scope of the publication is to defend perjury by imposture; and its contents are one tissue of disingenuous concealments, false assertions, forged quotations, and infuriate railing. In its way, certainly, it is unique; and we can safely recommend it to the curious as a bibliographical singularity, being perhaps the only example of a work, in which, from the first page to the last, it is impossible to find a sentence, not either irrelevant or untrue.

But though a reply on our part would thus be—not a Refutation but an Exposure; a reply, for that very reason, we consider imperative. It forms a principal feature of the Asserter's scheme of delusion to accuse us of deceit, (and deceit, amounting to knavery, must certainly adhere to one party or the other;) yet, though he has failed in convicting us even of the most unimportant error, many readers, we are aware, might be found to accord credence to averments so positively made, to set down to honest indignation the virulence of his abuse, and to mistake his effrontery for good faith. Were it also matter of *reasoning* in which the fallacy was attempted, we might leave its detection to the sagacity of the reader; but it is in matter of *fact*, of which we may well presume him ignorant. Aggressors, too, in the attack, the present is not a controversy in which we can silently allow our accuracy, far less our intentions, to be impugned by any. To establish, likewise, the illegality and self-admitted incompetence of the present academical system, is to establish the preliminary of all improvement,—*the necessity of change*. While happy, therefore, to avail ourselves of the occasion in adding to our former demonstration of this all-important point; we are not, of course, averse from manifesting how impotent, at once, and desperate, are the efforts which have been made to invalidate its conclusions. These considerations have moved us to bestow on the matter of this pamphlet an attention we should not assuredly have accorded to its merits. And as our reply is nothing but a manifestation of the contrast between the statements actually made by us, and those refuted, as ours, by our opponent; we are thus compelled to recapitulate the principal momenta of our argument, of which we must not presume that our readers retain an adequate recollection. Necessity must, therefore, be our excuse for again returning on a discussion, not less irksome to ourselves than

others; but we are reconciled to it by the consideration, that though we have no errors to correct, we have thus the opportunity of supplying, on this important subject, some not unimportant *omissions*.

Our former paper was intended to prove three great propositions.—I. That the present academical system of Oxford is *illegal*. II. That it was surreptitiously intruded into the University *by the heads of the collegial interest, for private ends*. III. That it is virtually acknowledged to be wholly *inadequate to accomplish the purposes of a University*, even by members of that interest, through whose influence, and for whose advantage, it is maintained.

I. In illustration of the *first* proposition, we showed that the University of Oxford is a public instrument, privileged by the nation for the accomplishment of certain public purposes; and that, for the more secure and appropriate performance of its functions, a power of self-legislation is delegated to the great body of its graduates, composing the House of Convocation. The resolutions of this assembly alone, or with concurrence of the Crown, form the Academical Statutes, and the statutes exclusively determine the legal constitution of the University. The whole academical statutes now in force, (with one or two passed, we believe, since 1826,) are collected and published in the *Corpus Statutorum* with its *Appendix*, and in its *Addenda*; the subsequent statute of course, explaining, modifying, or rescinding the antecedent.

Looking, therefore, to the Statutes, and the whole statutes,* we

* As *not sanctioned by Convocation*, the illegality of the present system is flagrant. But had it been so sanctioned, it would still be fundamentally illegal; as that body would have thus transcended its powers, by frustrating the ends, for the sake of which alone it was clothed with legislative authority at all. The public privileges accorded (by King or Parliament, it matters not,) to the education and degrees of a University, are not granted for the private behoof of the individuals in whom the University is realized. They are granted solely, for the public good, to the instruction of certain bodies organized under public authority, and to their certificate of proficiency, under conditions by that authority prescribed. If these bodies have obtained, to any extent, the right of self-legislation, it is only as delegates of the state; and this right could only be constitutionally exercised by them in subservience to the public good, for the interest of which alone the University was constituted and privileged, and this power of legislation itself delegated to its members. If an academical legislature abolish academical education, and

showed, that there were *two* academical systems to be distinguished in Oxford—a *legal* and an *illegal*; and that no two systems could be more universally and diametrically opposed.

In the *former*, the *end*, for the sake of which the University is privileged by the nation, and that consequently imperatively prescribed by the statutes, is to afford public education in the faculties of Theology, Law, Medicine, and Arts, (to say nothing of the science of Music,) and to certify—by the grant of a degree—that this education had in any of these faculties been effectually received.—In the *latter*, degrees are still ostensibly accorded in all the faculties, but they are now empty, or rather delusive, distinctions; for the only education at present requisite for all degrees, is the private tuition afforded by the colleges in the elementary department of the lowest faculty alone. Of ten degrees still granted in Oxford, all are given contrary to statute, and nine are in law and reason utterly worthless.

In the *former*, it is, of course, involved as a *condition*, that the candidate for a degree shall have spent an adequate time in the university in prosecution of his public studies in that faculty in which he proposes to graduate.—In the *latter*, when the statutory education in the higher faculties, and the higher department of the lowest, was no longer afforded, this relative condition, though indispensable by law, is converted into empty standing.

The *former*, as its principal *mean*, employs in every faculty a co-operative body of select Professors, publicly teaching in conformity to statutory regulation.—The *latter* (in which the wretched remnant of professorial instruction is a mere *hors d'œuvre*) abandons the petty fragment of private education it precariously affords, as a perquisite to the incapacity of an individual, Fellow by chance, and Tutor by usurpation.

To conceive the full extent of the absurdity thus occasioned, it must be remembered, that no universities are *so highly privileged* by any country as the English; and that no country is now *so completely defrauded of the benefits*, for the sake of which academical privileges were ever granted, as England. England is the only Christian country, where the Parson, if he reach the university at all, receives only the same minimum of Theological tuition as the Squire;—the only civilized country, where the degree,

academical trials of proficiency in the different faculties, it commits suicide, and as such, the act is, *ipso facto*, illegal. In the case of Oxford, Convocation has not been thus *felo de se*.

which confers on the Jurist a strict monopoly of practice, is conferred without either instruction or examination ;—the only country in the world, where the Physician is turned loose upon society, with extraordinary and odious privileges, but without professional education, or even the slightest guarantee for his skill.*

II. In proof of the *second* proposition we showed,—how, in subordination to the University, the Collegial interest arose ;—how it became possessed of the means of superseding the organ of which it was the accident ;—and what advantage it obtained in accomplishing this usurpation.

We traced how Colleges, in general, as establishments for habitation, aliment, and subsidiary instruction, sprang up in connection with almost all the older universities throughout Europe. The continental colleges were either so constituted as to form, at last, an advantageous alliance with the university, under the control of which the whole system of college instruction always remained ; or they declined and fell, so soon as they proved no longer useful in their subsidiary capacity. The English Colleges, on the other hand, were founded less for education than aliment ; were not subjected to the regulation of the university, with which they were never able, and latterly unwilling, to co-operate effectually ; and their fellowships were bestowed without the obligation of instructing, and for causes which had seldom a relation to literary desert. We showed how the colleges of Oxford, few in numbers, and limited in accommodation, for many centuries admitted only those who enjoyed the benefit of their foundations ; while the great majority of the academical youth inhabited the Halls, (houses privileged and visited by the university,) under the superintendence of principals elected by their own members.

The crisis of the Reformation occasioned a temporary decline of the university, and a consequent suspension of the Halls ; the Colleges, multiplied in numbers, were enabled to extend their circuit ; though not the intension of the act, the restoration of the Halls was frustrated by an arbitrary stretch of power ; the Colleges succeeded in collecting nearly the whole scholars of the university within their walls ; and the Fellows, in usurping from the other

* We doubt extremely, whether the Fellows of the London College of Physicians could make good their privileges, if opposed on the ground that, by the statutes of the universities themselves, not one of them has legal right to a degree. A word to the wise.

graduates the new, and then insignificant, office of Tutor. At the same time, through the personal ambition of two all-powerful statesmen, the Chancellors Leicester and Laud, (with the view of subjecting the university to a body easily governed by themselves,) the Heads of Houses were elevated to a new and unconstitutional pre-eminence. By the former, in spite of every legitimate opposition, these creatures of accident and private favour were raised to the rank of a public academical body; and, along with the *Doctors* of the three higher faculties, and the two Proctors, constituted into an assembly, to which the prior discussion was conceded of all measures to be proposed in Convocation. By the latter, an absolute initiative, with other important powers, was, by the exclusion of the Doctors, given and limited to the *Heads* and *Proctors*, a body which, from its weekly diets, has obtained the name of the *Hebdomadal Meeting*; and to obviate resistance to this arbitrary subjection of the university to this upstart and anomalous authority, the measure was virtually forced upon the House of Convocation by royal statute. The College Heads were now the masters of the university. They were *sworn*, indeed, to guarantee the observance of the laws, and to provide for their progressive melioration. But, if content to violate their obligations, with their acquiescence every statute might be abrogated by neglect, and without their consent no reform or improvement could be attempted.

Such a body was incapable of fulfilling—was even incapable of not violating—its public trust. Raised, in general, by accident to their situation, the Heads, as a body, had neither the lofty motives, nor the comprehensive views, which could enable them adequately to discharge their arduous duty to the university. They were irresponsible for their inability or bad faith,—for what they did or for what they did not perform; while public opinion was long too feeble to control so numerous a body, and too unenlightened to take cognisance of their unobtrusive usurpations. At the same time, their interests were placed in strong and direct hostility to their obligations.—*Personally* they were interested in allowing no body in the university to transcend the level of their own mediocrity; and a body of able and efficient Professors would have at once mortified their self-importance, and occasioned their inevitable degradation from the unnatural eminence to which accident had raised them. Conceive the Oxford Heads predominating over a senate of Professors like those of

Goettingen or Berlin!—Add to this, that the efficiency of the public instructors would have again occasioned a censure of students far *beyond the means of accommodation afforded by the Colleges*; and either the Halls must be revived, and the authority of the Heads divided, or the principle of domestic superintendence must be relaxed, on which, however, their whole influence depended.—*As representatives of the collegial interest*, they were also naturally hostile to the system of public instruction. If the standard of professorial competence were high in the Faculty of Arts, the standard of tutorial competence could never be reduced to the average capacity of the fellows; whose monopoly even of *subsidiary* education would thus be frustrated in the colleges. And if the professorial system remained effective in the Higher Faculties, it would be impossible to supersede it in the lower department of the lowest, in which alone the tutorial discipline could supply its place; and the attempt of the Colleges to raise their education from a subsidiary to a *principal* in the university, would thus be baffled.—Again, if the University remained effective, and residence in all the faculties enforced, the colleges would be filled by a crowd of Graduates, not only emancipated from tutorial discipline, but rivals even of the fellows in the office of tutor; while, at the same time, the restoration of the Halls could, in these circumstances, hardly be evaded.—All these inconveniences and dangers would however be obviated, and *profitably* obviated, if standing on the college books were allowed to count for statutory residence in the university. By this expedient, not only could the professorships in all the faculties be converted into sinecures,—the Colleges filled exclusively by students paying tutors' fees to the fellows,—and the academical population reduced to the accommodation furnished by the existing houses; but (what we have failed formerly to notice) a revenue of indefinite amount might be realised to the Colleges, by taxing standing on their books with the dues exigible from actual residence.*

* The last Oxford Calendar is before us. The number of under-graduates is not given, and we have not patience to count them; but we shall be considerably above the mark in estimating them at 1548, *i. e.* the number given by the matriculations for the year multiplied by 4. The whole members on the books amount to 5258. Deducting the former from the latter, there remain of members not restricted to residence, 3710. Averaging the Battel dues paid by each at thirty shillings, there results an annual income from this source alone of £.5565, (and it is much more,) to be distributed among

Through the agency of its Heads, the collegial interest accomplished its usurpation. *Public education in the Four Faculties was reduced to private instruction in the lower department of the lowest; and this, again, brought down to the individual incapacity of every Fellow-Tutor.*—The following we state in supplement of our more general exposition.

In the first place, this was effected by *converting the Professorial system of instruction*, through which, as its necessary mean, the University legally accomplishes the ends prescribed to it by law, *into an unimportant accident in the academical constitution.*

To this end, the professorial system was *mutilated*.—Public instruction was more particularly obnoxious to the collegial interest in the Faculty of *Arts*; and *four chairs*, established by the university in that Faculty, were, without the consent of the university asked or obtained, abolished by the Hebdomadal Meeting. The salaries of the Professorships of *Grammar, Rhetoric, Logic, and Metaphysic*, thus illegally suppressed, were paid by the Proctors out of certain statutory exactions; and we shall state our reasons for suspecting that their acquiescence in this and other similar acts, was purchased by their colleagues, the Heads of Houses, allowing these functionaries to appropriate the salaries to themselves. The Proctors hung more loosely on the collegial interest than the other members of the Hebdomadal Meeting; * and as their advantage was less immediately involved in the suppression of the professorial system, it required, we may suppose, some positive inducement to secure their thoroughgoing subservience to the crooked policy of the Heads. We know too, that

the Houses, for the improvement of Headships, Fellowships, the purchase of Livings, &c.

* Before the Caroline statute of 1628, the Proctors were elected by, and out of, the whole body of full graduates in all the faculties of the university. The office was an object of the highest ambition; men only of some mark and talent had any chance of obtaining it; and its duties were paid, not by money, but distinction. By this statute all was changed; and another mean of accomplishing its usurpation bestowed on the collegial interest. The election was given, in a certain rotation, to one of the Colleges, (the Halls being excluded;) and in the elective college, eligibility was confined to the masters, and the masters between four and ten years' standing. The office was now filled only by persons more or less attached to the collegial interest, and these appointed in a great measure by accident; while, as it afforded no honour, its labours must be remunerated by emolument. And let the Proctors be adequately paid, only let this be done in an open and legal manner.

the emolument of their office, allowed by law, is just *three pounds six shillings, sterling money*; while we also know, that its emolument, though not revealed in the calendar, is, in reality, sufficient to call up a wealthy incumbent from the country to the performance of its irksome duties. We have also the analogy of another chair which was certainly sequestered for their profit. The history of this job is edifying. The Professorship of Moral Philosophy was, in 1621, endowed by Dr Thomas White, under strict conditions for securing the efficiency of the chair; these were ratified by Convocation, and declared by law to be *inviolable*. And "that individuals every way competent (*viros undequaque pares*) to this readership may always be appointed," he intrusted (fond man!) the election to these members of the (future) Hebdomadal Meeting, the Vice-Chancellor, the Dean of Christ-Church, the Presidents of Magdalen and St John's, and the *Proctors* (under the old system.) What happened? The chair was converted into a sinecure; and one or other of the *Proctors*, by the very act of self-appointment, approved *undequaque par* to inculcate *Morality* by example, installed professor on every quinquennial vacancy.* What arrangement was made about the salary (£100), we know not.—Five out of eleven odious chairs were thus disposed of; and the co-operation of the *Proctors* secured.

To the same end, the remnant of the professorial system, not abolished, was *paralysed*. In our former paper, we showed how this system, as constituted by the Laudian statutes, though easily capable of high improvement, was extremely defective; partly from the incompetency or ill intention of the elective bodies; partly from the temporary nature of several of the chairs; but, above all, from the non-identity which subsisted between the

* This continued from 1673 till 1829. The patriotic exertions of the present Lord Chancellor, in the exposure of similar abuses in other public seminaries, had alarmed the Heads, and probably disposed them to listen to the suggestions of the more liberal members of their body. The job, too flagrant to escape notice or admit of justification, was discontinued. The Rev. Mr Mills, Fellow of Magdalen, was nominated Professor; and he has honourably signalized the reform, by continuing to deliver a course of lectures, which, we understand, have been (for Oxford) numerous attended. His introductory lecture, *On the Theory of Moral Obligation*, which is published, shows with what ability he could discharge its important duties, were the chair restored to that place in the academical system which it has a right to hold.

interest of the Professor and his *duty*. The Heads, though sworn to the scholastic improvement of the university, not only proposed no remedy for these defects; they positively withheld the correctives they were bound to apply; and even did all that in them lay to enhance the evil. Through collegial influence, persons wholly incompetent were nominated Professors; and every provision, by which the University anxiously attempted to insure the diligence of the public teacher, was, by the academical executive, sedulously frustrated. The Professors, now also most exclusively members of the collegial interest, were allowed to convert their chairs into sinecures; or to teach, if they ultroneously lectured, what, when, where, how, how long, to whom, and under what conditions, they chose. The consummation devoutly wished was soon realized. The shreds of the professorial system are now little more than curious vestiges of antiquity; and the one essential mean of education in the legal system of Oxford, as in the practice of all other universities, is of no more necessity, in the actual system, than if it were not, and had never been.

As to the lectures of the graduates at large, these were soon so entirely quashed, that the right of lecturing itself—nay, the very meaning of the terms *Regent* and *Non-Regent*, was at last wholly forgotten in the English Universities.*

This grand object of their policy, the Hebdomadal Meeting

* So long ago as the commencement of the last century, *Serjeant Miller*, the antagonist of Bentley, and who is praised by Dr Monk for his profound knowledge of academical affairs, once and again, in his "Account of the University of Cambridge," (pp. 21, 80,) assures us, that the terms "Regent" and "Non-Regent" *were not then understood*; and the same ignorance at the present day is admitted by the recent historian of that University, *Mr Dyer*. (*Privileges, &c.* ii. p. cxxiii.) Before our late article appeared, we do not believe there was a member of either English University who could have explained the principle of this distinction, on which, however, the constitution of these academical corporations fundamentally rests; or who was aware that every full graduate possesses, in virtue of his degree, the right of lecturing on any subject of his faculty in the public schools of the University.—On this right, it may be proper to add a few words in addition to what we formerly stated. It is certain, that, before the Laudian Corpus, graduation both conferred the *right*, and imposed the *obligation*, of public teaching; the one for ever, the other during a certain time.—In regard to the former, nothing was altered by this code. The form of a Bachelor's degree is, in fact, to this moment, that of a license to lecture on certain books within his faculty; and that of a Master's and Doctor's, a license to commence

was constrained to carry through, without even the pretext of law. There is neither statute nor dispensation to allege for the conduct of the Heads, or the conduct of the Professors.

In the *second* place, the obligation of *attendance on the public lectures* was no longer enforced. This violation of the statutes was correlative of the last; but in the present instance, it would appear, that the illegality has been committed under the semblance of a legal act.

In our former article, as then uncertain touching the point of actual practice, we could only in general demonstrate, that *no universal dispensation of attendance on the public lectures is conceded by statute*, and that none such, therefore, could legally be passed either by Congregation or Convocation. We have since ascertained, that a dispensation is pretended for this non-observance as obtained from Congregation, under the dispensing power conceded to that house, "*Pro minus diligenti publicorum Lectorum auditione*;" at least, such a dispensation is passed for all candidates, while no other relative to the observance in question is conceded. It will here be proper to prove more particularly, that the dispensation in the present instance, actually accorded, and the dispensation necessarily required, have no mutual proportion. The dispensation *required*, in order to cover the violation, is one:—1°, for an absolute non-attendance; 2°, without the excuse of an unavoidable impediment; and, 3°, to all candidates indifferently. The dispensation which Congregation *can* concede—the dispensation therefore actually conceded, is, 1°, not granted for non-attendance absolutely, but only for the negation of its highest quality—a not altogether diligent attendance; 2°, not granted without just reason shown; and, 3°, consequently not granted to all, but only to certain individuals. It must be remembered, that every candidate for graduation is unconditionally bound by statute to have "*diligently heard* (*diligenter audivisse*)

(incipere—hence Occam's title of *Venerabilis Inceptor*.) all those solemn acts of teaching, disputation, &c., which belong to, and are required of, a perfect graduate, (T. ix.)—In regard to the latter, the obligation of public teaching is declared not repealed, (T. iv. § 1;) and if the obligation could still be enforced, *a majore*, the right could still be exercised. It is only permitted to Congregation to dispense with the "*necessary regency*," if they, on the one hand, *for a reasonable cause, think fit*, and if the inceptor, on the other, choose to *pay* for this indulgence. (T. ix. S. iv. § 2. 21.) In point of fact, this right of lecturing continued to be exercised by the graduates for a considerable time after the ratification of the Corpus Statutorum.

the public lectures" relative to his degree: whilst the fulfilment of this condition, *in the same terms*, is sworn to in the oath he makes to the senior Proctor; and forms part of his supplication for a grace to the House of Congregation. But as no one could strictly aver that he had "diligently heard" these lectures who was absent from their delivery, however seldom, (and the framers of the statutes were as rigid in their notions of perjury as the administrators have subsequently been lax.) while at the same time it would have been unjust to deprive a candidate of his degree for every slight and unavoidable non-performance of this condition; it was therefore thought equitable and expedient to *qualify* the oath to the extent of allowing, "*occasionally*," to "*certain persons*," for the reason of a "*just hinderance*," a dispensation "*for the non-fulfilment of every particuilar, in the mode and form required by statute*," and in special "*for the not completely regular (minus diligenti) attendance on the public readers*." The words are:—"Cum *justa quandoque impedimenta* interveniant, quo minus *ea omnia*, quæ ad Gradus et alia exercitia Universitatis requiruntur, *modo et forma* per Statuta requisitis, rite peragantur; consuevit Congregatio Regentium in hujusmodi causis cum *personis aliquibus* in materia dispensabili *aliquoties* gratiose dispensare." (Corp. Stat. T. ix. S. 4, § 1, Add. p. 135) —After this preamble, and governed by it, there follows the list of "*Dispensable Matters*," permitted to *Congregation*, of which the one in question, and already quoted, is the fourth.

It is a general rule that all statutes and oaths are to be interpreted "*ad animum imponentis*;" and the Oxford legislators expressly declare, that the academical statutes and oaths are violated if interpreted or taken in a sense different from that in which they were intended by them, and if against the interests of education, (Epinomis.) Now, that it was intended by *Convocation* to convey to *Congregation*, by this clause, *a general power of absolving all candidates from the performance of the one paramount condition of their degree, no honest man in his senses will venture to maintain*. The supposition involves every imaginable absurdity. It is contrary to the plain meaning of the clause, considered either in itself or in reference to the obligation which it modifies; and contrary to its meaning, as shown by the practice of the University, at the period of its ratification, and long subsequent. It would stultify the whole purport of the academical laws,—make the University commit suicide, (for the University

exists only through its public education,)—and suicide without a motive. It would suppose a statute ratified only to be repealed; and a dispensation intended to be co-extensive with a law. It would make the legislative House of Convocation to concede to the inferior House of Congregation, a power of dispensing with a performance infinitely more important than the most important of those in which it expressly prohibits this indulgence to itself; and all this, too, by a clause of six words, shuffled in among a score of other dispensations too insignificant for mention.

The *non-attendance of candidates on the public courses*, as permitted by the Heads, is thus *illegal*; and *perjury* is the price that must be paid by all for a degree.

In the *third* place, the *residence in the University* required by statute to qualify for all degrees above Bachelor of Arts was not enforced. This violation is also a corollary of the two former; and here likewise, but without success, it is attempted to evade the illegality.

The House of *Convocation*, i. e. the graduates, regent and non-regent, of the University, though fully possessing the powers of legislation, found it necessary to *limit their own capacity of suspending*, in particular cases, the ordinary application of their statutes. If such a dispensing power were not strictly limited, the consequences are manifest. The project of an *academical law*, as a matter of general interest, solemnly announced, obtains a grave deliberation, with a full attendance both of the advocates and opponents of the measure; and it is passed under the consciousness that it goes forth to the world to be canvassed at the bar of public opinion, if not to be reviewed by a higher positive tribunal. The risk, therefore, is comparatively small, that a statute will be ratified, glaringly contrary either to the aggregate interests of those who constitute the University, or to the public ends which the University, as an instrument privileged for the sake of the community, necessarily proposes to accomplish. All is different with a *dispensation*. Here the matter, as private and particular, and without any previous announcement, attracts, in all likelihood, only those in favour of its concession; is treated lightly, as exciting no attention; or passed, as never to be known, or, if known, only to be forgot. The experience also of past abuses, had taught the academical legislators to limit strictly the license of dispensation permitted to themselves:—"Quia ex nimia dispensandi licentia grave incommodum Universitati antehac obor-

tum est (nec aliter fieri potuit;) statuit et decrevit Universitas, ne, in posterum, dispensationes ullatenus proponantur in casibus sequentibus." (Corp. Stat. T. x. S. 2, § 5.) A list of matters is then given (described in our last paper, p. 443 sq.) with which Convocation cannot dispense; the most important of which are, however, in actual practice violated without a dispensation. It is sufficient here to notice, that the matters declared *indispensable*, (those particulars, namely, in which this indulgence had formerly been abused,) to say nothing of the others declared *dispensable*, are the *merest trifles compared with that under discussion*. Under the heads, both of Dispensable and of Indispensable Matter, a general power is indeed cautiously left to the Chancellor, of allowing the Hebdomadal Meeting to propose a dispensation; but this only "from some *necessary* and *very urgent* cause (*ex necessaria et perurgente aliqua causa*), and moreover under the former head, only "in cases which are not repugnant to academical discipline, (*qui disciplinæ Academicæ non repugnant*). The legislature did not foresee that the very precautions thus anxiously adopted, to prevent the abuse of dispensation in time to come, without altogether surrendering its conveniences, were soon to be employed *as the especial means of carrying this abuse to an extent, compared with which all former abuses were as nothing*. They did not foresee that the Chancellor was soon to become a passive instrument in the hands of the Hebdomadal Meeting; that these appointed guardians of the law were soon themselves to become its betrayers; that the Collegial bodies were soon to cherish interests at variance with those of the University; that nearly the whole resident graduates were soon to be exclusively of that interest, and soon, therefore, to constitute, almost alone, the ordinary meetings of the two Houses; and that in these ordinary meetings, under the illegal covert of Dispensations, were *all the fundamental Statutes of the University to be soon absolutely annulled, in pursuance of the private policy of the Colleges*.

Under the extraordinary dispensing power thus cautiously left to the Chancellor, Heads, and Convocation, a legal remission of the *residence* required by statute is now attempted; but in vain.

From his situation, the Chancellor is only the organ of the Collegial Heads. His acts are therefore to be considered as theirs. Chancellor's Letters are applied for and furnished, ready made, by the University Registrar, to all proceeding to degrees above Bachelor of Arts, permitting the Hebdomadal Meeting to

propose in Convocation a dispensation in their favour for the residence required by statute. The dispensation is proposed, and, as a matter of routine, conceded by the members of the collegial interest met in an ordinary Convocation.—But is this legal? Is this what was intended by the legislature? Manifestly not. The contingency in the eye of law, for which it permits a dispensation, and the case for which, under this permission, a dispensation is actually obtained, are not only different, but contrary. We shall not stop to argue that the dispensation obtained is illegal, because “repugnant to academical discipline;” for it is manifestly, as far as it goes, the very negation of academical discipline altogether. We shall take it upon the lowest ground.—A dispensation of its very nature is relative to particular cases; and in allowing it to Convocation, the law contemplated a particular emergency arising from “*some necessary and very urgent cause*,” not to be anticipated by statute, and for which, therefore, it provides a sudden and extraordinary remedy. But who will pretend that a *perpetual remission* of attendance to *all* could be comprehended under this category? Such a dispensation is universal, and therefore tantamount to a negation of the law. It thus violates the very notion of a dispensation.—Then, it does not come under the conditions by which all dispensations, thus competent to Convocation, are governed. It is neither “*necessary*” nor “*very urgent*.” Not certainly, at the commencement of the practice; for how, on any day, week, month, or year, could there have arisen a *necessity*, an *urgency*, for abolishing the term of residence quietly tolerated during five centuries, so imperative and sudden, that the matter could not be delayed (if a short delay were unavoidable) until brought into Convocation, and approved or rejected as a general measure? But if the “*cause*” of dispensation were, in this case, so “*necessary*,” and so “*very urgent*,” at first, that it could not brook the delay even of a week or month, how has this necessity and urgency been protracted for above a century? The present is not one of those particular and unimportant cases, with which, it might be said, that the statutes should not be incumbered, and which are therefore left to be quietly dealt with by dispensation. The case in question is of universal application, and of paramount importance; one, of all others, which it was the appointed duty of the Heads to have submitted without delay to the academical legislature, as the project of a law to be by Convocation rejected or approved. (Tit. xiii.)

The dispensation of residence is thus palpably illegal.

III. In evidence of the third proposition, we showed, as already proved,—that the present academical system is illegal, being one universal violation of another system, exclusively established by the statutes of the University;—that this illegal system is for the private behoof of the Colleges;—that this system, profitable to the Colleges, was intruded into the University by their Heads, who for this end violated, or permitted to be violated, the whole fundamental statutes they were appointed to protect;—that this conflict between a legal system suspended in fact, and an actual system non-existent in law, has been maintained solely by the Heads, who, while possessing the initiative of all statutes, have, however, hitherto declined submitting the actual system to Convocation, in order to obtain for it a legal authorization:—But all members of the University make oath to the faithful observance of the academical statutes; and the Heads, specially sworn to see that these are by all faithfully observed, are by statuto branded as pre-eminently guilty of “broken trust and perjury,” if even “by their negligence, any [unrepealed] statute whatever is allowed to fall into disuse:”—Consequently, the Heads have, for themselves, voluntarily incurred the crime of “broken trust and perjury,” in a degree infinitely higher than was ever anticipated as possible by the legislature; and, for others, have, for their interested purposes, necessitated the violation of their oaths by all members of the University.*

Now, taking it for granted that, *without a motive*, no body of magistrates would live, and make others live, in a systematic disregard of law,—that no body of moral censors would exhibit the spectacle of their own betrayal of a great public trust,—and that no body of religious guardians would hazard their own salvation, and the salvation of those confided to their care:†—on this ground we showed, that while every motive was manifestly against, no motive could possibly be assigned for, the conduct of the Heads, in so long exclusively maintaining their intrusive

* “He is guilty of perjury, who promiseth upon oath, what he is not morally and reasonably certain he shall be able to perform.”—(TILLOTSON, Works, vol. i. p. 248. Sermon on the Lawfulness and obligation of Oaths.)

† “Ille qui hominem provocat ad jurationem, et scit eum falsum juraturum esse, vicit homicidam: quia homicida corpus occisurus est, ille animam, imo duas animas; et ejus animam quem jurare provocavit, et suam.”—(AUGUSTINUS in Decollat. S. Joannis Baptistae et hab. 22. quaest. 5. Ille qui.)

system, and never asking for it a legal sanction; except their consciousness, that it was *too bad to hope for the solemn approval of a House of Convocation, albeit composed of members of the collegial interest, and too profitable not to be continued at every sacrifice.*

Rather indeed, we may now add, than hazard the continuance of this profitable system, by allowing its merits to be canvassed even by a body interested in its support, tho Heads have violated not only their moral and religious obligations to the University and country, but, in a particular manner, their duty to the Church of England. By law, Oxford is not merely an establishment for the benefit of the English nation; it is an establishment for the benefit of those only in community with the English Church. But the heads well knew that the man will *subscribe* thirty-nine articles which he cannot believe, who *swears* to do and to have done a hundred articles which he cannot, or does not, perform.* In this respect, private usurpation was for once more (perversely) liberal than public law. Under the illegal system, Oxford has ceased to be the seminary of a particular sect; its governors impartially excluding all religionists or none. Nor is this all. The natural tendency of the academical ordeal was to sear the conscience of the patient to every pious scruple;† and the example of “the accursed thing” thus committed and enforced by “the Priests in the high places,” extended its pernicious influence, from the Universities, throughout the land. England became the country in Europe proverbial for a disregard of oaths;‡ and the English Church, in particular,

* Nay, the oath for observance of the *Statutes* is, by the academical legislature, held a matter of far more serious obligation than the subscription of the *Thirty-nine Articles*. For by Statute (T. II. § 3,) the intrant is not allowed to take the oath until he reach the age of sixteen; whereas the subscription is lightly required even of boys matriculating at the tender age of twelve. [Of this more again.]

† “Dico vobis non jurare omnino; ne scilicet jurando ad facilitatem jurandi veniatur, de facilitate ad consuetudinem, de consuetudine ad perjurium decidatur.”—(AUGUSTINUS De Mendacio.) “In Novo Testamento dictum est, Ne omnino juremus: quod mihi quidem propterea dictum esse videtur, non quia jurare peccatum est, sed quia pejerare immane peccatum est, a quo longe nos esse voluit, qui omnino ne juremus commovit.”—(IDEM in Epist. ad Publicolam, et hab. 22. qu. 1. in novo.)

‡ [See the reflections of Bishops *Sanderson* and *Berkeley* on this national opprobrium quoted in the seventh article of this series.]

was abandoned, as a peculiar prey, to the cupidity of men allured by its endowments, and educated to a contempt of all religious tests.* As Butler has it:—

“ They swore so many lies before,
That now, without remorse,
They take all oaths that can be made,
As only things of course.” †

No one will doubt the profound anxiety of the Heads to avert these lamentable consequences, and to withdraw themselves from a responsibility so appalling. We may therefore estimate at once the intensity of their attachment to the illegal system, as a private source of emolument and power, and the strength of their conviction of its utter worthlessness, as a public instrument for accomplishing the purposes of an University. Not only will the system, when examined, be found absurd; it is already admitted to be so: and all attempt at an apology by any individual, by any subordinate, member of the collegial interest, would be necessarily vain, while we can oppose to it “the deep damnation” reluctantly pronounced on their own act and deed by so many generations of the Collegio Heads themselves.

It thus appears, that the downfall of the University has been the result, and the necessary result, of subjecting it to an influence jealous of its utility, and, though incompetent to its functions, ambitious to usurp its place. The College Heads have been, and will always be, the bane of the University, so long as they are suffered to retain the power of paralysing its efficiency: at least, if a radical reconstruction of the whole collegial system do not identify the interests of the public and of the private corporations, and infuse into the common governors of both a higher spirit and a more general intelligence. We regret that our charges against the Heads have been so heavy; and would repeat, that our strictures have been applied to them not as individuals, but exclusively in their corporate capacity. We are even disposed altogether to exempt the recent members of this body from a reproach more

* [This melancholy consequence came out more obtrusively, after the observation in the text was written. See the same article.]

† Another annoying consequence of the illegal state of the English Universities may be mentioned. The Heads either durst not, under present circumstances, attempt, or would be inevitably baffled in attempting, to resist the communication to other seminaries of those academical privileges which they themselves have so disgracefully abused. The truth of this observation will probably soon be manifested by the event. [And has been.]

serious than that of ignorance as to the nature and extent of their duty to the University;* while we freely acknowledge that they have inadequately felt the want, and partially commenced the work, of reformation, which we trust they may long live to see completed. We should be sorry indeed not to believe, that, among the present heads, there are individuals fully aware that Oxford is not what it ought to be, and prepared cordially to co-operate in restoring the University to its utility and rights. But it is not in the power of individuals to persuade a body of men in opposition to their interests: and even if the whole actual members of the Hebdomadal Meeting were satisfied of the dishonest character of the policy hitherto pursued, and personally anxious to reverse it; we can easily conceive that they might find it invidious to take upon themselves to condemn so deeply so many generations of their predecessors, and a matter of delicacy to surrender, on behalf of the collegial interest, but in opposition to its wishes, the valuable monopoly it has so long been permitted without molestation to enjoy. In this conflict of delicacy, interest, and duty, the Heads themselves ought to desire,—ought to invoke, the interposition of a higher authority. A Royal or Parliamentary Visitation is the easy and appropriate mode of solving the difficulty;—a difficulty which, in fact, only arose from the intermission, for above the last century and a half, of that corrective, which, since the subjection of the University to the Colleges, remained the only remedy for abuses, and abuses determined by that subjection itself. Previous to that event, though the Crown occasionally interposed to the same salutary end, still the University possessed within itself the ordinary means of reform; Convocation frequently appointing delegates to inquire into abuses, and to take counsel for the welfare and melioration of the establishment. But by bestowing on a private body, like the Heads, the exclusive guardianship of the statutes, and the initiative of every legal measure, Convocation was deprived of the power of active interference, and condemned to be the passive spectator of all that the want of wisdom, all that the self-seeking of the academical executive might do, or leave undone.

* Any degree of such ignorance in the present Heads we can imagine possible, after that recently shown by the most intelligent individuals in Oxford, of the relation subsisting between the public and the private corporations. As we noticed in our last paper, the parasitic Fungus is there mistaken for the Oak; the Colleges are viewed as constituting the University.

Through the influence, and for the personal aggrandisement of an ambitious statesman, the Crown delivered over the reluctant University, bound hand and foot, into the custody of a private and irresponsible body, actuated by peculiar and counter interests; and, to consummate the absurdity, it never afterwards interfered, as heretofore, to alleviate the disastrous consequences of this its own imprudent act. And had the Heads met, had they expected to meet, the occasional check of a disinterested and wiser body, they would probably never have even thought of attempting the collegial monopoly of education which they have succeeded in establishing on the ruin of all the faculties of the University. This neglect was unfair, even to the Heads themselves, who were thus exposed to a temptation, which, as a body, it was not in their nature to resist. "*Ovem lupo comisisti.*" But it is not the wolf, who acts only after kind, it is they who confide the flock to his charge, who are bound to answer for the sheep. To the administrators of the State, rather than to the administrators of the University, are thus primarily to be attributed the corruptions of Oxford. To them, likewise, must we look for their removal. The Crown is, in fact, bound, in justice to the nation, to restore the University against the consequences of its own imprudence and neglect. And as it ought, so it is alone able. To expect, in opposition to all principle and all experience, that a body, like the Heads,—that a body even like the present House of Convocation,—either could conceive the plan of an adequate improvement, or would will its execution, is the very climax of folly. It is from the State only, and the Crown in particular, that we can reasonably hope for an academical reformation worthy of the name.

"*Et spes et ratio studiorum in Cesare tantum.*"

But with a patriot King, a reforming Ministry, and a reformed Parliament, we are confident that our expectations will not be vain. A general scholastic reform will be, in fact, one of the greatest blessings of the political renovation, and, perhaps, the surest test of its value.

And on this great subject, could we presume personally to address his Majesty, as supreme Visitor of the Universities, we should humbly repeat to William the Fourth, in the present, the counsel which *Locke*, in the last great crisis of the constitution, solemnly tendered to William the Third:—"Sire, you have made a most glorious and happy Revolution; but the good effects of

it will soon be lost, if no care is taken to regulate the Universities." *

On the other hand, were we to address the Senators of England, as the reformers of all abuses both in church and state; though it needs, certainly, no wizard to expose the folly of waiting for our reformation of the English Universities from the very parties interested in their corruption; it would be impossible to do so in weightier or more appropriate words, than those in which Agrippa—"the wise Cornelius"—exhorts the Senators of Cologne, to take the work of reforming the venerable University of that city exclusively into their own hands:—"Dicetis forte, *quis nostrum ista faciet, si ipsi scholarum Rectores et Præsides id non faciunt?*—Certe si illis permittitis reformationis hujus negotium, in eodem semper luto hærebitis; cum unusquisque illorum talem gestiat formare Academician, in qua ipse maxime in pretio sit futurus, ut hactenus asinus inter asinos, porcus inter porcos. Vestra est Universitas; vestri in illa præcipue erudiuntur filii; vestrum negotium agitur. Vestrum ergo est omnia recte ordinare, prudenter statuere, sapienter disponere, sancte reformare, ut vestræ civitatis honor et utilitas suadent; nisi forte vultis filiis vestris ignavos, potius, quam eruditos, præesse Magistros, atque in civitatem vestram competat, quod olim in Ephesios;—*Nemo apud nos fit frugi; si quis extiterit, in alio loco et apud alios fit ille.*" [Cf. Barclaii Satyric. p. 91.] Quod si filios vestros, quos Reipublicæ vestræ profuturos genuistis, bonarum literarum gratia ad externas urbes et Universitates peregre mittitis erudiendos, cur in vestra urbe illos his studiis fraudatis? Cur artes et literas non recipitis peregrinas, qui filios vestros illarum gratia emittitis ad peregrinos? - - - Quod si nunc prisci illi urbis vestræ Senatores sepulchris suis exirent, quid putatis illos dicturos, quod *tam celebrem olim Universitatem vestram, magnis sumptibus, laboribus et precibus ab ipsi huic urbi comparatam, vos taliter cum obtenebrari patimini, tum funditis extingui sustineatis?* Nemo certe negare potest,

* This anecdote is told by Serjeant Miller, in his "Account of the University of Cambridge," published in 1717, (p. 188.) It is unknown, so far as we recollect, to all the biographers of Locke. But William probably thought, like Dr Parr, "that the English Universities stood in need of a thorough reformation; only, as seminaries of the church, it was [selfishly] the wisest thing for [King and] Parliament to let them alone, and not raise a nest of hornets about their ears."—The Universities are not, however, now so strong; public opinion is not now so weak; whilst the nation at length seems roused from its apathy, urgent and earnest for a reform.

urbem vestram civesque vestros omnibus Germaniæ civitatibus rerum atque morum magnificentia antependendam, *si unus ille bonarum literarum splendor vobis non deesset*. Polletis enim omnibus fortunæ bonis et divitiis, nullius, ad vitæ et magnificentiæ usum egetis; sed hæc omnia apud vos mortua sunt, et velut in pariete picta; quoniam quibus hæc vivificari et animari debeant, anima caretis, hoc est, *bonis literis non polletis*, in quibus solis honor, dignitas, et immortalis in longævam posteritatem gloria continetur.”*

The preceding statement will enable us to make brief work with the Assertor.—His whole argument turns on *two* cardinal propositions: the one of which, as maintained by us, he refutes; the other, as admitted by us, he assumes. Unfortunately, however, we maintain, as the very foundation of our case, the converse of the proposition he refutes as ours; and our case itself is the formal refutation of the very proposition he assumes as conceded.

The proposition professedly refuted is,—*That the legitimate constitution of the University of Oxford was finally and exclusively determined by the Laudian Code, and that all change in that constitution, by subsequent statute, is illegal.*

The proposition assumed is,—*That the present academical system, though different from that established by the Laudian Code, is, however, ratified by subsequent statute.*

(This refutation and assumption, taken together, imply the conclusion,—*That the present system is legal.*)

The *former* proposition, as we said, is *not ours*; we not only never conceiving that so extravagant an absurdity could be maintained, but expressly stating or notoriously assuming the reverse in almost every page, nay establishing it even as the principal basis of our argument. If this proposition were true, our whole demonstration of the interested policy of the Heads would have been impossible. How could we have shown, that the changes introduced by them were only for the advantage of themselves and of the collegial interest in general, unless we had been able to show, that there existed in the University, a *capacity of legal change*, and that the *preference of illegal change* by the Heads, argued that their novelties were such, as they themselves were satisfied, did not deserve the countenance of Convocation, that is,

* Epistolæ L. vii. ep. 26. Opera, II. p. 1042.

of the body legislating for the utility and honour of the University? If all change had been illegal, and, at the same time, change (as must be granted) unavoidable and expedient; the conduct of the Heads would have found an ample cloak in the folly,—in the impossibility of the law.—Yet the Venerable and Veracious Member coolly “asserts,” that this, as the position which we maintain, is the position which he writes his pamphlet to refute. With an effrontery, indeed, ludicrous from its extravagance, he even exults over our “luckless admission,”—that Convocation possesses the right of rescinding old, and of ratifying new, laws,” (p. 25); and (on the hypothesis, always, that we, like himself, had an intention of deceiving), actually charges it as “one of our greatest blunders”—a blunder betraying a total want of “common sense”—“to have referred to the Appendix and Addenda to the Statute-book,” (p. 86,) *i. e.* to the work we reviewed, to the documents on which our argument was *immediately and principally* founded!*

In regard to the *latter* proposition, it is quite true that IF the former academical system had been *repealed*, and the present *ratified* by Convocation, the actual order of things in Oxford is *legal*, and the Heads stand guiltless in the sight of God and man. But, as this is just the matter in question, and as instead

* It may amuse our readers to hear how our ingenuous disputant lays out his pamphlet, alias, his refutation of “the *Medish* immutability of the Landian digest.” This immutability he refutes by arguing:—

“From the general principles of jurisprudence, as they relate to the mutability of human laws. (Sect. II.)—From the particular principles of municipal incorporation, as they relate to the making of by-laws. (Sect. III.)—From the express words of the *Corpus Statutorum*. (Sect. IV.)—From immemorial usage, that is, the constant practice of the University from 1234 to 1831. (Sect. V.)—From the principle of adaptation upon which the statutes of 1636 were compiled and digested. (Sect. VI.)—From Archbishop Laud’s own declarations in respect of those statutes. (Sect. VII.)—From his instructions to Dr Frewin, in 1638, to submit to Convocation some amendments of the statute-book, after it had been finally ratified and confirmed. (Sect. VIII.)—From the alterations made in the statute-book after the death of the Archbishop, but during the lives of those who were his confidential friends, and had been his coadjutors in the work of reforming it. (Sect. IX.)—From the alterations made in the statute-book from time to time, since the death of the Archbishop’s coadjutors to the present day. (Sect. X.)—From the opinion of counsel upon the legality of making and altering statutes, as delivered to the Vice-Chancellor, June 2, 1759. (Sect. XI.)—p. 16.—This elaborate parade of argument (the pamphlet extends to a hundred and fifty mortal pages) is literally answered in *two* words—*Quis dubitavit?*

of the affirmativo being granted by us, the whole nîsus of our reasoning was to demonstrate the negative; we must hold, that since the Assertor has adduced nothing to invalidate our statements on this point, he has left the controversy exactly as he found it. To take a single instance:—Has he shown, or attempted to show, that by any subsequent act of Convocation those fundamental statutes which constitute and regulate the Professorial system, as the one essential organ of all academical education, have been repealed?—nay, that the statutes of the present century do not on this point recognise and enforce those of those preceding?—(Add. p. 129—133, pp. 187, 188, et passim.) If not, how, on his own doctrine of the academic oath, (*in which we fully coincide*,) does he exempt the guardians of its statutes, to say nothing of the other members of the University, from perjury?—(*Major*.) “It” (the academic oath) “is, and will always be, taken and kept with a safe conscience, as long as the taker shall faithfully observe the academic code, in *all its fundamental ordinances*, and according to their *true meaning and intent*. And with respect to other matters, it is safely taken, if taken according to *the will of those who made the law*, and who have the power to make or unmake, to dispense with or repeal, any, or any parts of any, laws educational of the University, and to sanction the administration of the oath with larger or more limited relations [*i. e.?*] according to what Convocation may deem best and fittest for the ends it has to accomplish.”—(P. 132.)—(*Minor*.) In the case adduced, the unobserved professorial system is a “fundamental ordinance,” is exclusively “according to the will of those who made, make, and unmake the law,” exclusively “according to what Convocation deems the best and fittest.”*—(*Conclusion*.) Consequently, &c.

In confuting the propositions we have now considered, the

* See SANDERSON *De Juramenti Obligatione*, Prael. III. § 18.—too long to extract.—The Assertor avers, but without quoting any authority, that Sanderson wrote the *Epinomis* of the *Corpus Statutorum*. If true, which we do not believe, the fact would be curious. It is unnoticed by Wood, in his *Historia, Annals, or Athena*,—it is unknown to Walton, or to any indeed of Sanderson's biographers. It is also otherwise improbable. Sanderson left the University in 1619, when he surrendered his fellowship, and only returned in 1642, when made Regius Professor of Divinity. The Statutes were compiled in the interval; and why should the *Epinomis* be written by any other than the delegates? We see the motive for the fiction;—it is too silly to be worth mentioning.

Assertor's whole pamphlet is confuted. We shall however notice (what we cannot condescend to disprove) a few of the subaltern statements which, with equal audacity, he holds out as maintained by us, and some of which he even goes so far as to support by fabricated quotations.—Of these, one class contains assertions, not simply false, but precisely the *reverse of the statements really made by us*. Such, for instance:—That we extolled the academic system of the Laudian code as perfect, (pp. 95, 96, 144, &c.);—That we admitted the actual system to be not inexpedient or insufficient, (p. 95); and, That this system was introduced in useful accommodation to the changing circumstances of the age, (p. 95).—Another class includes those assertions that are *simply false*. For example:—That we expressed a general approbation of the methods of the ancient University, and of the scholastic exercises and studies, beyond an incidental recognition of the utility of Disputation, and that too, [though far from undervaluing its advantages even now,] in the circumstances of the middle ages; and we may state, that the quotation repeatedly alleged in support of this assertion is a coinage of his own, (pp. 6, 11, 83, 96, 97, 138, 139;—That we reviled Oxford for merely deviating from her ancient institutions, (pp. 5, 11, 12, 95, &c.);—That we said a single word in delineation of the Chamberdeekyn at all, far less (what is pronounced “one of the cleverest sleights of hand ever practised in the whole history of literary legerdemain”) “transformed him into an amiable and interesting young gentleman, poor indeed in pocket, but abundantly rich in intellectual energies, and in every principle that adorns and dignifies human nature!” (p. 113).—Regarding as we do the Assertor only as a curious psychological monstrosity, we do not affect to feel towards him the indignation, with which, coming from any other quarter, we should repel the false and unsupported charges of “depraving, corrupting, and mutilating our cited passages,” (p. 24);—of “making fraudulent use of the names and authorities of Dr Newton and Dr Wallis, of Lipsius, Crevier, and Du Boullay,” (p. 142); and to obtain the weight of his authority, of fathering on Lord Bacon an apophthegm of our own, though only alleging, without reference, one of the most familiar sentences of his most popular work. (p. 7).—To complete our cursory dissection of this moral *Lusus Naturæ*, we shall only add that he quotes us just *thirteen* times; that of these quotations *one* is authentic; *six* are more or less altered; *one* is garbled, half a sentence

being adduced to support what the whole would have overthrown, (p. 20); and *five* are fabrications to countenance opinions which the fabricator finds it convenient to impute to us, (pp. 9, 10, 11, 110, 141.)

We might add much more, but enough has now been said.—We have proved that our positions stand unconfuted,—uncontroverted,—untouched; * that to *seem* even to answer, our opponent has been constrained to reverse the very argument he attacked; and that the perfidious spirit in which he has conducted the controversy, significantly manifests his own consciousness of the hopeless futility of his cause.

* [And what was true twenty years ago, is, in every respect, true now.]

VI.—ON THE RIGHT OF DISSENTERS TO ADMISSION INTO THE ENGLISH UNIVERSITIES.

(OCTOBER, 1834.)

A Bill to remove certain Disabilities which prevent some classes of his Majesty's Subjects from resorting to the Universities of England, and proceeding to Degrees therein. 21 April, 1834.

THE whole difficulty of the question, in regard to the admission of Dissenters into the English Universities, lies in the present anomalous state—we do not say *constitution*—of these establishments. In them the *University*, properly so called, *i. e.* the necessary national establishment for general education, is at present illegally suspended, and its function usurped, but not performed, by a number of private institutions which have sprung up in accidental connection with it, named *Colleges*.

Now, the Claim of the Dissenters to admission into the *public university* cannot justly be refused; nor, were the university in fact, what it ought legally to be, would the slightest difficulty or inconvenience be experienced in rendering that right available. But the university has been allowed to disappear,—the colleges have been allowed to occupy its place: and, while the actual, that is the *present*, right of the colleges, as private establishments, to close their gates on all but members of their own foundations, cannot be denied; independently of this right, the expediency is worse than doubtful, either, on the one hand, of forcing a college to receive inmates, not bound to accommodate themselves to its religious observances, or, on the other, of exacting from those entitled to admission, conformity to religious observances, in opposition to their faith. Now, neither in the bill itself, nor in any of

the pamphlets and speeches in favour of the Dissenters, or against them, is there any attempt made to grapple with the real difficulties of the question; and the opponents of the measure are thus left to triumph on untenable ground, in objections which might be retorted with tenfold effect upon themselves.

The sum of all the arguments for exclusion amounts to this :—The admission of the Dissenters is *inexpedient*, as inconsistent with the present state of education in the universities, which is assumed to be all that it ought to be; and *unjust*, as tending to deprive those of their influence, who are assumed to have most worthily discharged their trust.—In reply, it has been only feebly attempted, admitting the assumptions, to evade the right, and to palliate the inconveniences. Instead of this, it ought to have been boldly contended :—in the *first* place, that the actual state of education in these schools is entitled to no respect, as contrary at once to law and to reason; and that all inconveniences disappear the moment that the universities are in the state to which law and reason demand that they be restored; in the *second*, that so far from unjustly degrading upright and able trustees, these trustees have, for their proper interest, violated their public duty; and, for the petty ends of their own private institutions, abolished the great national establishment, of whose progressive improvement they had solemnly vowed to be the faithful guardians.

In attempting any reform of an ancient institution like the English Universities, it should be laid down as a fundamental principle, that the changes introduced be, as far as possible, in conformity with the spirit and even the mechanism of these institutions themselves. The English Universities, as spontaneously developed and as legally established, consist of *two* elements; and the separate perfection, and mutual co-operation and counterpoise of these elements, determine the perfection of the constituted whole. The one of these, principal and necessary, is the public instruction and examination in the several faculties afforded by the *University Proper*; the other, subordinate and accidental, is the private superintendence exercised in the *Licensed House*, which the under-graduate must inhabit, and the private tuition afforded by the *Licensed Tutor*, under whose guidance he must place himself. We are no enemies to this constitution. On the contrary, we hold that it affords the condition of an absolutely perfect university. The English universities, however, afford a melancholy illustration of the axiom, "*Corruptio optimi pessima.*"

In them the principles of health are converted into the causes of disease.

In two preceding articles, [the two last,] we have shown, (especially in regard to Oxford, but in all essential circumstances our statements apply equally to Cambridge,) that in the English Universities there is organised, *by Statute*, an extensive system of Public instruction, through a competent body of Professors constantly Lecturing in all the Faculties; but that, *de facto*, this statutory system has now no practical existence. We have shown that, besides this original and principal system,—through which, in fact, alone other universities accomplish their end,—the English universities came subsequently to employ *two* other subordinate means,—means intended more to ensure order than to bestow instruction. In the *first* place, they required, from a remote period, that every member of the university should belong to some house governed by a graduate, licensed by the academical authorities, and responsible to them for the conduct of the other members of the establishment; and in the *second*, they have, for above two centuries, enjoined that all under-graduates, who were then generally four years younger than at present, should be likewise under the special discipline of a *tutor*, whose principal office it was, privately to do what the University could not constitutionally, in its lay Faculty of Arts,* *publicly* attempt,—“institute his pupil in the rudiments of religion and the doctrine of the Thirty-nine Articles;” but so little was expected from this subsidiary instructor, that by statute any one is competent to the office who has proceeded to his Bachelors’ degree in Arts, (a degree formerly taken by the age at which the University is now entered,) and whose moral and religious character is approved by the head of the house to which he belongs,† or in the event of a dispute on this point, by the Vice-Chancellor. We also showed how all these parts of the public academical constitution had been illegally annihilated, or perverted by the influence and for the

* [It has been ignorantly contended against this, that the Faculty of Arts in the older Universities was *not lay but clerical*; and this on the ground that the learners and teachers of that faculty are frequently called *clerici*. But those who know anything of mediæval language are aware, that *clericus* necessarily means nothing more than *gownsmen, scholars*. Even the expression *benefit of clergy* in the English law might have prevented the mistake.]

† It does not appear from the Statutes that the Tutor must be of the same house with the Pupil.

behoof of a private interest in the university. This interest was the collegial. We traced how, through the unconstitutional elevation (by Laud) of the College Heads to a public academical body, intrusted with the exclusive guardianship of the statutes, and the initiative of every legislative measure, the collegial interest had contrived, through "the broken faith and perjury" of its heads, to effect the following exploits:—1. To obtain the monopoly of board and lodging, by frustrating the former easy establishment of Halls, (authorised, but unincorporated houses;) and by preventing, through every disastrous mean, an influx of students to the university beyond their own limits of accommodation. 2. To usurp the monopoly of the tutorial office for their fellows, although fellowships are in few instances (especially in Oxford) the rewards of merit, but usually the gifts of accident and caprice. 3. To abolish the whole statutory system of public or professorial instruction in all the faculties; and thus to render the wretched scantling of preliminary instruction afforded by the college fellows, the sum of necessary education for all professions which the university was permitted to supply.—We have recapitulated these things, because, in considering the consequences of the proposed measure, it is requisite to bear in mind, not only what is the actual, but what is the legal system of these institutions.

With the view of simplifying the question, and removing all unnecessary confusion, we shall make at once certain preliminary admissions.

In the *first* place, we admit that the colleges are foundations private to their incorporated members; that their admission of *extranei* or independent members, is wholly optional; and that, as they may exclude all, they consequently may exclude any. The legislature cannot, therefore, without a change of their constitution, deprive them of this fundamental right.

In the *second* place, we admit that, whether the religious observances of the colleges be imposed by their statutes or by the members themselves of the foundation, that it would be an unwarrantable exercise of legislative interference, either on the one hand to compel them to accommodate these observances to the taste of those intruded into their society; or, on the other, to subvert the discipline of the house, by emancipating any part of its inmates from the rules established for the conduct of the whole.

In the *third* place, we admit, that compelling the college to

receive dissenters, it would be wholly impossible to compel, for a continuance at least, the dissenters to the religious observances of the college.

We admit, in the *fourth* place, that if to the colleges were left the right of optional exclusion, few dissenters, in the present state of the universities, would either condescend to enter, or be able, if so inclined, to accomplish their desire.—On the one side the dissenter would be thus exposed to the humiliation of refusal; constrained, if admitted, to compliance with religious exercises to which he is adverse; and exposed to all the indignities through which a baffled bigotry might delight to avengo itself.—On the other hand, the accommodation in the colleges, even at present, is quite inadequate to the demand for admission; the colleges cannot, therefore, hereafter be expected to exclude their brethren of the church to admit their cousins of the meeting-house,—supposing even the irritation to have subsided, which the victory of the dissenters would at first, at least, inevitably occasion.

In the *fifth* place, we admit that, *as they are now operative*, the English Universities exist only in and through the Colleges; that as the Colleges are private foundations, the Universities, *in their actual state*, are not national establishments; and that as it would be unjust to force the dissenters on the Colleges, consequently it would be, either unjust or idle, *as things at present stand*, to bestow on dissenters the right of entering the Universities.

These admissions, though the points mainly contended for by the opponents of the bill, do not, however, determine the question. On the contrary, they only manifest the present preposterous state of the universities, and the utter ignorance that prevails in regard to their normal condition.—It is certainly true, that if in Oxford and Cambridge the Colleges constitute the University, the dissenters have no claim to admission; because in that case the university is *not a national foundation*. But, that the university exists only through the colleges, the former being a great incorporation, of which the latter form the constituent parts, is a proposition so utterly false, and is founded on so radical an ignorance of the history and constitution of the schools in question, that we should have deemed it wholly unworthy of refutation, were it not maintained by so respectable an authority as Bishop Coplestone; and assumed with impunity, nay, general acquiescence,—as a basis for their argument, by Mr Goulburn and Sir Robert Inglis, the representatives of either English Univer-

sity, in the recent debates in the House of Commons upon the question. Mr Goulburn, in his speech against the bill, and Mr Baynes, in his speech in favour of it, both asserted, that when Edward I. visited Cambridge, Peter-House, being then the only college in existence, alone constituted the University. "*Peter-House College*" (interrupts the latter) "*was at that time the whole University.*" "*I know it was,*" resumes the learned representative of the University, of whose history he is so well informed. At the date in question, the scholars of the University of Cambridge were certainly above five thousand,—the inmates of Peter-House probably under fifty! We had formerly occasion (pp. 412, 413, note,) to animadvert on this mistake; and shall at present only say, that the Universities of Oxford and Cambridge were *incorporated and privileged* before, in either place, there was a College in existence; that they *flourished as general studies* long before a single College was established; and that they owe their *downfall* in these latter ages to the corrupt and unconstitutional subjection of the Academical legislature to the control or influence of the College Heads. To say, in fact, that the English Universities are national foundations, is saying far too little. Those at all acquainted with the rise of the more ancient Universities, and in particular of Oxford and Cambridge, know that they were literally *cosmopolite corporations*; and if in their privileges a preference were betrayed at all, it was not generally in favour of the native.

But admitting (what cannot be denied) the natural right of the dissenters to the privileges of the Public University, and on the hypothesis, that special grounds cannot be alleged to warrant its suspension;—How, it may be asked, can they make their right available?

In the *first* place, in whatsoever manner it has been brought about, the result is unfortunately certain:—*Neither University now affords any public education* worthy of the name. If, therefore, it may be said, the dissenters obtain a right of entrance to the University, without also obtaining a right of admission to the Colleges, *they will be foiled of all benefit from the concession.*—To this we answer, that the dissenters and all other citizens are entitled to *demand*, that the Universities be restored to an efficient,—to a legal state; and that the guardianship of the reformed school be confided to worthier trustees than those who have hitherto employed their authority only to frustrate its end.—We

gladly join issue with the Bishop of Exeter and Sir Robert Inglis on this point. [See next following article.]

In the *second* place, it may be said :—You admit that dissenters have no title to demand admission to the Colleges ; the University requires that all students should belong to a privileged house ; there are no privileged houses but the colleges and their dependent halls ; the only gates to the university are therefore closed, —*how are they to get in ?*—To this we say, various expedients may be proposed. But before attempting an answer, let us take a review of the rise and progress of the system of domestic superintendence in the universities ; and we shall avail ourselves of the observations on this subject made in a former article, to which for proof and details we must refer. [P. 419, *sq.*]

During the middle ages, the vast concourse of students of every country to the greater universities made it necessary to employ various methods of academical police. In the English Universities, the chancellor and his deputy combined the powers of the rector and the two chancellors in Paris ; and the inspection and control, chiefly exercised in the latter, through the distribution of the scholars of the university into nations and tribes, under the government of rector, procurators, and deans, was, in the former, more especially accomplished by collecting the students into certain privileged houses, under the control of a principal, responsible for the conduct of the members. This subordination was not indeed established at once ; and the scholars at first lodged, without domestic superintendence, in the houses of the citizens. In the year 1231, we find it only ordained, by royal edict, “ that every clerk or scholar [resident in Oxford or Cambridge] should subject himself to the discipline and tuition of some master of the schools ; ” or, on a different reading, “ some master of scholars ; ” *i. e.* we presume, enter himself as the peculiar disciplo of one or other of the actual regents. And in the same year, the academical *taxers* are instituted, in imitation of the foreign universities, in order to check the exorbitant charge for lodging usually practised on the part of the townsmen.—By the commencement of the fifteenth century, it appears, however, to have become established law, that all scholars should be members of some college, hall, or entry, under a responsible head. In the subsequent history of the university we find more frequent and decisive measures taken in Oxford against the *Chamberdekyns*, or scholars haunting the public lectures, but of no

authorized house, than in Paris were ever employed against the *Martinets*. And while in the foreign universities none but students of the faculty of arts were subjected to collegial or bursal superintendence; in the English universities, the graduates and under-graduates of every faculty were equally required to be members of a privileged house.

By this regulation, the students were compelled to collect themselves into houses of community, variously denominated Halls, Hostels, Inns, Entries, Chambers, (*Aulae, Hospitia, Introitus, Camerae.*) These halls were governed by peculiar statutes, established by the University, by whom they were also visited and reformed; and they were administered by a principal, elected by the scholars themselves, but admitted to his office by the chancellor or his deputy, on finding caution for payment of the rent. The halls were in general held only on lease; but by a privilege common to most Universities, houses once occupied by clerks or students could not again be taken from the gown, if the rent were punctually discharged; the rate of which was quinquennially fixed by the academical taxators. The great majority of the scholars who inhabited these halls lived at their own expense; but the benevolent motives which, in other countries, determined the establishment of colleges and private *bursæ*, nowhere operated more powerfully than in England. In a few houses, foundations were made for the support of a certain number of indigent scholars, who were incorporated as fellows, (or joint participators in the endowment,) under the government of a head. But with an unenlightened liberality, these benefactions were not, as elsewhere, exclusively limited to *learners*, during their academical studies, and to *instructors*; and whilst merit was not often the condition on which their members were elected, the subjection of the colleges to private statutes, with their emancipation from the control of the academical authorities, gave them interests apart from those of the public, and not only disqualified them from co-operating towards the general ends of the university, but rendered them, instead of powerful aids, the worst impediments to its utility.

The Colleges, into which commoners, or members not on the foundation, were, until a comparatively modern date, rarely admitted, remained also for many centuries few in comparison with the Halls. The latter were counted by hundreds; the former, even at the present day, extend only to nineteen.

In Oxford, at the commencement of the fourteenth century, the number of the halls was about three hundred,—the number of the secular colleges at the highest, only *three*. At the commencement of the fifteenth century, when the colleges had risen to *seven*, it appears, that the students had diminished as the foundations had increased. At the commencement of the sixteenth century, the number of halls had fallen to *fifty-five*, while the secular colleges had, before 1516, been multiplied to *twelve*.

From causes, which in our former article we fully stated, the universities during the period of the Reformation were almost literally deserted. The halls, whose existence solely depended on the confluence of students, thus fell; and none, it is probable, would have survived the crisis, had not several chanced to be the property of certain colleges, which had thus an interest in their support.

The circumstances which occasioned the ruin of the halls, and the dissolution of the cloisters and colleges of the monastic orders in Oxford, not only gave to the secular colleges, which all remained, a preponderant weight in the university for the juncture, but allowed them so to extend their circuit and to increase their numbers, that they were subsequently enabled to comprehend within their walls nearly the whole of the academical population; though, previously to the sixteenth century, they appear to have rarely, if ever, admitted independent members at all. As the students fell off, the rents of the halls, which could not be alienated from academical purposes, were taxed always at a lower rate; and they became, at last, of so insignificant a value to the landlords, that they were always willing to dispose of this fallen and falling property for a trifling consideration. In Oxford, land and houses became a drug. The old colleges thus extended their limits, by easy purchase, from the impoverished burghers; and the new colleges, of which there were *four* established within half a century subsequent to the Reformation, and altogether *six* during the sixteenth century, were built on sites either obtained gratuitously or for an insignificant price. After this period only *one* college was founded—in 1610; and three of the eight halls transmuted into colleges, in 1610, 1702, and 1740; but of these one is now extinct.

These circumstances explain in what manner the halls declined; it remains to tell, why, in the most crowded state of the univer-

sity, not one has been subsequently restored.—Before the era of their downfall, the establishment of a hall was easy. It required only that a few scholars should hire a house, find caution for a year's rent, and choose for principal a graduate of respectable character. The chancellor, or his deputy, could not refuse to sanction the establishment. An act of usurpation abolished this facility. The general right of nomination to the principality, and consequently to the institution of halls, was, "through the absolute potency he had, procured by the Earl of Leicester," chancellor of the University, about 1570; and it is now, by statute, vested in his successors. In surrendering this privilege to the chancellor, the colleges were not blind to their peculiar interest. From his situation, that magistrate was sure to be guided by their heads: no hall has since arisen to interfere with their monopoly; and the collegial interest, thus left without a counterpoise, and concentrated in a few hands, was soon able to establish an absolute supremacy in the university.

Having thus, in obedience to Bacon's precept, "reduced things to their first institution, and observed how they had degenerated:" we are in a condition "to take counsel of both times,—of the ancients time what is best, and of the later time what is fittest; to reform without bravery or scandal of former ages; but yet, to set it down to ourselves as well to create good precedents as to follow them."

Were the system of public education in the English Universities recalled into being, raised to the perfection which it ought to obtain, and access to its benefits again opened to all;—a greatly increased resort to Oxford and Cambridge would be the inevitable result. The colleges and halls hardly suffice at present;—how then can additional numbers, without detriment, if not with advantage, to the established discipline, be accommodated?—Now, in answering this question, we may do so either generally,—or in special reference to the dissenters. But it is evident, that an expedient mode of solving the problem, is, if possible, to be devised, without taking religious differences into account.

The only plan that has been proposed to obviate the difficulties which the actual, though illegal, merging of the Public University in the private colleges presents to the admission of dissenters, is to allow them to found a *college or colleges for themselves*.—We strongly deprecate this plan. We do not, of course, question the *right* of the dissenters, if admitted to the university, of founding

and endowing colleges, nay of imposing what religious conditions they may choose, either on a participation in the endowments or on admission within the walls. But we regard the exercise of this right as inexpedient,—even as detrimental, in the highest degree. To say nothing of its expense, and supposing always that such a measure might be carried into effect with far better means of furthering the ends of education than the old foundations, through their fellows, generally supply; still it would accomplish nothing which may not be effected by much easier methods; whilst it would contribute to entail a continuance of that sectarian bigotry and intolerance which, in this country, at present, equally disgraces the established and dissenting divisions of our common faith. By this proceeding, the exclusive spirit of the present colleges would be imitated, justified, exacerbated, and perpetuated; and in the old colleges and the new together, the universities would become the nurseries and camps and battle fields of a ferocious and contemptible polemic: whereas, left to themselves, and to the influence of a more enlightened spirit, there is no doubt, but the ancient foundations will be gradually won over by the liberality of the age, and the charities of a common Christianity. We are confident, their disabilities being removed, and the means offered to the dissenters of a university education, without any forced religious compliances, that they would never think of establishing for themselves collegiate foundations of a sectarian character; and we are equally confident, that if this were not attempted by them, and did the accommodation in the authorized houses of the university once exceed in a degree the demand for admission, that the colleges would be equally patent to such dissenters as were not averse from their observances, as to members of the Established Church. And that such means may be easily afforded, without violating the constitutional discipline of the universities, is manifest from the history we have previously given of the system of their domestic superintendence.

Without, therefore, proposing to dispense with domestic superintendence altogether, as was originally the case in Oxford and Cambridge, and as has been always generally practised in other universities; and without supposing the necessity of any expensive foundations, or even of establishments that will not easily support themselves; we think the difficulty may be overcome, by simply returning to the ancient practice of the English universi-

ties, in regard to the easy establishment of Halls or Hostels; under any new restrictions, however, that may be found proper to enhance their character and utility.—These halls may be established under a double form. Either the hall shall consist only of a single house, in which its head or principal (necessarily a graduate) resides; or of a number of separate houses, each under the care of an inferior officer, bound to report to the principal all violations of rule. The advantage of the latter form would be its more moderate expense. The great benefits which this return to the natural system of the university would afford in breaking the detestable monopoly of the fellow-tutors,—in presenting to merit a free and honourable field of competition,—in retaining in the universities men of distinguished learning and ability,—in determining an improvement both of the public and private education,—and in raising to a high pitch the standard of academic accomplishment; these, and other advantages, we may probably take a more fitting opportunity of discussing. In reference to our present question, this restoration of the halls would, we think, obviate all difficulties in regard to the dissenters, were the routine of morning and evening prayers, in conformity to the Liturgy, simply not rendered imperative in the new establishments; of which, indeed, for the sake of religion itself, the old ought, perhaps, to be relieved.—But on details we cannot now enter; and hasten to consider the *other* objections by which the measure for the admission of dissenters has been principally opposed.

1°. It is objected, that universities in general, and the English universities in particular, are not more places of literary and scientific instruction than places of *religious education*; that religion can be only taught on the doctrine of a single sect; that the dominant sect in the state must remain the dominant sect in the university; consequently, universities, and especially the English universities, are not places into which dissenters from the established faith ought either to wish, or should be allowed, to enter.

This objection is of any cogency only from the miserable confusion in which it is involved. We must make two distinctions:—distinguish, firstly, the religious education given in the Public University from the religious education afforded in the Private Colleges; and, secondly, in the former, the *professional* instruction in religion given to the future divine in the faculty of Theo-

logy, from the *liberal* instruction in religion which may be given to all in the preliminary or general faculty of Arts.

In so far as regards the University Proper, there is no difficulty whatever. We shall suppose this restored to life,—to be as it has been, and ought to be. It will not be contended that, either in the English universities, or in any university whatever, it was ever required or expected, if indeed allowed, that persons admitted for general education in arts, or for professional education in law or medicine, should attend the professional lectures delivered in the theological faculty. The theological faculty will always teach the doctrine of the establishment; but none need attend its instructions beside those destined for the church:—nay, to the ineffable disgrace of the establishment and universities, so far are Oxford and Cambridge from being pre-eminently religious schools, that *the Anglican is the one example in Christendom of a church, whose members are not prepared for their holy calling, by an academical course of education in the different branches of theology; and the English are the only Universities in the world, in which such a course cannot actually be obtained.* The English clergyman is perhaps destitute of academical education altogether; but if he enjoys this advantage, “one fortnight,” (to use the words of Professor Pusey,) “comprises the beginning and end of all the public instruction which any candidate for holy orders is required to attend, previously to entering upon his profession.” Yet, though the London University only omits, what the Church of England does not think it necessary to require of its ministers,—a course of professional education in divinity,—and though the London University *actually* teaches what Oxford and Cambridge teach only *in statute*; yet the members of that church and of these universities clamour against the incorporation of the London University, because, forsooth, it *does not fulfil the conditions which its name implies!*

We may take this opportunity, by way of parenthesis, of saying a few words in exposition of the very general mistake in regard to the name and nature of a University;—a mistake which threatens to become of serious practical importance, from the consequences that are now in the course of being deduced from it. *University*, in its academical application, is supposed to mean a *university of sciences or faculties, (scientiarum, facultatum universitas.)*

Pleased as we are with the candour of Mr Sewell's confessions,

—"that the University of Oxford is not an enlightened body,"—"that we (its members) have little liberality in religion,"—and "study logic in a very humble way;" we should hardly have been moved to a refutation of his opinion, (founded on this interpretation of the word,) that the "University of London," as excluding theology from its course of studies, is unentitled to the name it has usurped. But when it has been seriously argued before the Privy Council by Sir Charles Wetherell, on behalf of the English Universities, as a ground for denying a charter to this institution, that the simple fact of the Crown incorporating an academy under the name of *university*, necessarily, and in spite of reservations, concedes to that academy the right of granting *all possible degrees*; nay, when (as we are informed) the case itself has actually occurred,—the "Durham University," inadvertently, it seems, incorporated under that title, being in the course of claiming the exercise of this very privilege as a right, necessarily involved in the public recognition of the name:—in these circumstances, we shall be pardoned a short *excursus*, in order to expose the futility of the basis on which this mighty edifice is erected.

Sir Charles Wetherell, after quoting the argument of Mr Attorney-General Yorke, in the case of Dr Bentley—"The power of granting degrees flows from the Crown. If the Crown erects a *university*, the power of conferring degrees is incident to the grant. Some old degrees the universities have abrogated, some new they have erected," &c.) *inter alia*, contends;—"The second point stated in Mr Yorke's argument is equally material to be kept in view; namely, that the power of conferring degrees is incident to a university, and some particular remarks must be borrowed from it. Allusion was made the other day by Dr Lushington to a passage stated in the Oxford petition, importing that they had been advised that it was matter of great doubt, whether a proviso in the charter, restricting this institution from conferring degrees in divinity, would be binding and effectual, and some surprise was expressed at it. That advice I gave, and I considered Mr Attorney-General Yorke as my coadjutor in giving it, for it is founded upon his opinion. I understand that a charter is now asked for, to make a university, who are not to grant theological degrees. There is something very whimsical in this: for theological learning is, beyond all doubt, one of the main purposes and characteristics of a

university. But, say these gentlemen, (and their friends and advocates, at the Common-Council at Guildhall, said the same thing,) to be sure it will be too hard to have a university pretending to give degrees in theology, for we have neither *Θεός* in the place, nor *Λόγος*. The Deity and Revelation we intend not ourselves to recognise,—we shall ask only for degrees in arts, law, surgery, and medicine. But even the surgical or medicinal degree is likely to be amputated; at present, at least, they have no means to confer it. In this state of things, (independently of the general legal argument with which I have troubled your Lordships, to show that theology, according to the doctrines of the Church of England, must form a part of the instruction given in an institution which is to be established as a university,) this question of law arises:—How can this anomalous and strange body be constituted in the manner professed? It is to be a '*University*,' but degrees in theology it is not to give. But Mr Attorney-General Yorke tells us, that the power of giving degrees is incidental to the grant. If this be law, is not the power of conferring theological degrees equally incidental to the grant, as other degrees; and if this be so, how can you constitute a university without the power of giving '*all*' degrees? The general rule of law undoubtedly is, that where a subject-matter is granted which has legal incidents belonging to it, the incidents must follow the subject granted; and this is the general rule as to corporations; and it has been decided upon that principle, that as a corporation, as an incident to its corporate character, has a right to dispose of its property, a proviso against alienation is void." *

We entertain great respect for the professional authority of Mr Yorke and of Sir Charles Wetherell; and should not certainly have ventured to controvert that authority on any question of *English law*. But this is no such question. Here the cardinal point is the meaning of the word *universitas*, in its academical signification. But as the word was originally not of English but of European consuetude; and as it will not be pretended that of old it had a different meaning as applied to Oxford and Cambridge, (in which sense, the Crown in this country must be supposed in any new erection to employ the word,) from what it expressed as

* "Substance of the speech of Sir Charles Wetherell before the Lords of the Privy Council, on the subject of incorporating the London University." London: 1834, pp. 79-81.

applied to Paris or Bologna: consequently, the whole question resolves itself into one, to be determined, not by English law, (for there can be neither rule nor recent precedent in the case,) but by the analogies to be drawn from the history and charters of the ancient European universities. And without research, dipping only into the academical documents nearest at hand, we shall find no difficulty in proving that *University*, in its proper and original meaning, denotes simply the *whole members of a body* (generally, incorporated body,) *of persons teaching and learning one or more departments of knowledge*; and not an institution privileged to teach a determinate circle of sciences, and to grant certificates of proficiency (degrees) in any fixed and certain departments of that circle (faculties).

The oldest word for an unexclusive institution of higher education, was *Studium*, and *Studium generale*,—terms employed in the twelfth and thirteenth centuries, and retained in those which followed.—The word *universitas*, in the common language of Rome, is equally applicable to *persons* and to *things*. In the technical language of the civil law, it was, in like manner, applied to both. In the former signification, (convertible with *collegium*,) it denoted a plurality of persons associated for a continued purpose, and may be inadequately rendered by *society*, *company*, *corporation*; in the latter, it denoted a certain totality of individual things, constituted either by their mutual relation to a certain common end, (*universitas facti*,) or by a mere legal fiction, (*universitas juris*).—In the language of the middle ages, it was applied either loosely to any understood class of persons;* or strictly (in the acceptance of the Roman law) to a public incorporation, more especially (as equivalent with *communitas*) to the members of a municipality,† or to the members of “a general study.” In this last application it was, however, not uniformly of the same amount; and its meaning was, for a considerable period, determined by the words with which it was connected. Thus, it was used to denote either

* For instance, in 1212, *universitas vestra*, applied by municipality of Oxford to “omnibus Christi fidelibus;” and four years after, by the Papal Legate, to “omnibus Magistris et Scholaribus Oxonii commorantibus.” In 1276, *universitas vestra*, applied, in same deed, by Bishop of Ely, to “universis Christi fidelibus,” and *universitas*, used as convertible with “universitas Regentium et Scholarium studentium Cantabrigie.”

† See Du Cange and Carpentier in voce; add Bulaeus, iv., p. 27. Fattorini, ii. p. 57–58. It was frequently applied to the college of Canons in a cathedral.

(and this was its more usual meaning) the whole body of teachers and learners,* or the whole body of learners,† or the whole body of teachers and learners, divided either by faculty,‡ or by country,§ or by both together.¶ But no one instance can, we are confident, be adduced, in which (we mean until its original and proper signification had been forgotten**) it is employed for a school teaching, or privileged to teach, and grant degrees, in all the faculties. As "*communitas*," which originally was employed only with the addition of "*incolarum civitatis*," or the like, came latterly, absolutely and by itself, to denote the whole members of a civic incorporation;—so *universitas*, at first currently employed as a convertible expression for "*communitas*," and in its academic application, always joined with "*magistrorum et scholarium*," or some such complementary term, came, during the fourteenth century, to be less frequently employed in the former signification; and in the latter meaning, to be used either simply by itself, or, for a time, frequently in combination with "*studium*," or "*studium generale*;" †† the

* Paris. Bull, in 1209, *Doctorum et Scholarium Universitas*; Bull, 1218, *Doctorum et discipulorum U.*; University itself, 1221, *U. Magistrorum et Scholarium*; Henry III. of England, *U. Scholarium*; a history, 1225, *U. Scholarium*.—So Thoulouse in 1233; Montpellier, 1289; Lisbon, 1290; Bologna, 1235.—Oxford. Matthew Paris, c. 1250, *U. Scholarium*, and passim; Royal Charter, 1255, *U. Scholarium*; Royal Letter, 1255, same; Royal letters, 1286, same; Bull, 1300, *U. Magistrorum, Doctorum et Scholarium*; University itself, 1312, *U. Magistrorum et Scholarium*.—Cambridge. Royal letter, 1268, *U. Scholarium*; Decree, 1276, *U. Regentium et Scholarium. Universitas Studentium*, occurs in Ross, c. 1486.

† In Bologna and Padua, the whole body of students were styled *U. Scholarium*, (though at an ancient date, the term *scholaris* includes both teacher and learner).

‡ In Bologna and Padua the students, according to faculty, were divided into the *U. Juristarum*, and *U. Artistarum*. We have before us the *Statuta Almae Universitatis Juristarum Patavinorum*. 4, 1550.

§ In Bologna and Padua, the students, according to nations, were divided into *U. Ultramontanorum*, and *U. Cismontanorum*.

¶ In Padua, we have *U. Juristarum Ultramontanorum*, and *U. Juristarum Cismontanorum*; the *U. Artistarum Ultramontanorum*, and *U. Artistarum Cismontanorum*.

** Thus Halle, (founded 1694,) was styled *Studiorum Universitas*, a phrase equally erroneous as that applied to the new University of Frankfurt—*Publica Universitas*.

†† For example:—Paris. Bull, 1358; the University itself, in a letter, 1406.—Vienna. Charter, 1366; Bull, 1384.—Prague. Bull, 1347, and 1398.—Oxford. Bull, 1300.—Louvain. Bull, 1425.—Aberdeen. Bull, 1526, *universitas studii generalis*.

other, and more ancient denomination,—as, *universitas studii Oxoniensis, Parisiensis, &c.**—The oldest universities arose spontaneously during the twelfth and thirteenth centuries. The mighty crowds drawn from every country of Europe by an Irnerius to Bologna, or by an Abelard or a Lombardus to Paris, received at first local immunities, in order to fix the teachers and students in the towns, which well appreciated the advantages of this great resort; and the papal and royal privileges subsequently conceded, did not create the faculties which they then publicly protected. But by this public protection, the universities became from that moment integral parts of the Church and State; and, consequently could not, of their own authority, organize new faculties,† not in existence at the date of their privileges.

* The term *STUDIUM GENERALE*, in like manner, did not mean originally, that all was taught, but that what was taught, was taught to all. Oxford and Cambridge will thus only, by the abolition of the test, be restored to the rank of universities. "*Studia generalia*," (says a great jurist of the sixteenth century, the dean of the juridical faculties in three universities.)—" *Studia generalia, hodie, seu publica dicuntur, scholæ, in quibus publice ex privilegio pontificis summi vel principis, vel antiqua consuetudine, cujus initii non extat memoria, studium est privilegiatum, et permissa societas et concursus scholasticorum et docentium; continens pro contento. Potest dici studium generale et universitas ratione eadem, quod studia quæ ibi tractantur universis proposita sint et sint publica, et gratis, volentibus discere, proponantur ab institutis preceptoribus, sintque privilegia universis studentibus concessa. Neque ideo minus studia generalia dicuntur aut universitates, quod non omnes scientiæ ibi, sed certæ tantum tractentur et doceantur. Nam generalitas ad universitatem non pertinet scientiarum, sed ad publicam causam docendi: prout enim placuit illis qui instituerunt et erexerunt et privilegiarunt studia, scientiæ et artes ibidem legi publice tantum debent, et si aliæ legantur, non utantur privilegiis quibus præscriptæ docendæ, et earum doctores et auditores utantur et potiuntur. Non enim actus agentium operantur ultra illorum intentionem. (L. non omnis nomenclatio, de reb. credit. P.)" Petrus Gregorius Tholosanus *De Republica*, llib. xviii. c. 1, § 87.*

† To understand the meaning of the word *Faculty*, it must be remembered that originally, in all the older Universities, a Degree conferred the right, nay, imposed the obligation, of teaching; and a faculty was, after universities had become public, the body of teachers or graduates, who not only had the privilege of lecturing on a certain department of knowledge, of examining and admitting candidates for degrees into their body, but also the right of making statutes, choosing officers, employing a seal, and of doing all that pertains to a privileged corporation.—In the Italian universities, the faculty was composed of the teachers and students together.—There, indeed, the students were originally all in all.

The University of Paris, like those of Oxford and Cambridge, at first existed only in the lay Faculty of Arts. On this faculty, these great universities are founded, as in it alone they once existed; and in the two latter, the higher faculties never, in fact, were separated, as in the continental schools, into independent corporations. In Paris, the faculties of Divinity, Canon Law, and Medicine subsequently arose; but there was no faculty of Civil Law when Paris received its privileges; and it consequently neither could of itself create that faculty, nor, for certain reasons, was it able to obtain papal authorization so to do. But Paris, though thus without a principal faculty, was acknowledged over Europe, not only as a *university*, or general study, but the school above all others entitled to the name. Its title was, “the First School of the Church;” and so little did the term *universitas* imply an academical encyclopædia, and a full complement of faculties, that several of the most venerable universities possessed, while in the zenith of their European fame, only a single faculty,—as Salerno, the single faculty of medicine.

Mr Yorke is mistaken when he says,—“Some old degrees the Universities (of Oxford and Cambridge) have abrogated, *some new* they have erected.” The former clause of the sentence is true, in so far as these seminaries have allowed some (*e. g.*, the minor degrees in grammar and logic) to fall into desuetude; and the degrees in canon law, by command of the Crown, were discontinued at the Reformation; but no new degree have they introduced, or attempted to introduce. The precedent thus alleged, in confirmation of his principle, in fact disproves it.

In like manner, in all the Universities throughout Europe, which were not merely privileged, but created by bull and charter, every liberty conferred was conferred not as an *incident*, through implication, but by express concession. And this in two ways:—For a university was empowered, either by an explicit grant of certain enumerated rights, or by bestowing on it implicitly the known privileges enjoyed by certain other pattern Universities. These modes were frequently conjoined; but we make bold to say, that there is not to be found, throughout Europe, one example of a University erected without the grant of determinate privileges,—far less of a University, thus erected, enjoying, through this omission, privileges of any, far less of every other.—In particular, the right of granting degrees, and that in how many faculties, must (in either way) be expressly conferred.

The number of the faculties themselves is extremely indeterminate; and, to many universities and faculties, the right of conferring certain special degrees has been allowed, the possessors of which did not constitute a faculty at all. For example, the degrees in Grammar, Logic, Poetry, Music, &c. It was the common custom to erect a university in only certain faculties; and not unfrequently a concession of the others was subsequently added. Thus—

During the thirteenth century, Innocent IV. founded in, and migratory with, the court of Rome, a university of only two faculties,—Theology, and the Laws, in one faculty,—but with all the privileges of a “*Studium Generale*.” This was amplified during the fourteenth century, with professorships of Hebrew, Chaldee, and Arabic; and, finally, Eugenius IV. bestowed on it a complement of all the faculties. For this case we rely on Tholosanus.

Pope Martin V. erected, in 1425, the great university of Louvain, as a “*Studium Generale*,” or “*Universitas Studii*,” in the faculties of Arts, the Canon and Civil Laws, (forming two faculties,) and Medicine; nor was it until some years thereafter (1431) that Eugenius IV. conceded to it the privilege of a fifth or Theological faculty and promotions. This case we take from the *Diplomata* themselves.

Altdorf was, in 1578, erected by the Emperor, in favour of the free city of Nuremberg, into an academy of one faculty, that of Arts or Philosophy, with the right to that faculty of conferring its ordinary degrees of Bachelor and Master, but without the general rights and privileges of a University. In 1622, the Faculties of Law and Medicine were conceded, with all privileges; and the faculty of Arts also received the right almost peculiar to the University of Vienna, of creating Poets Laureate. (The right of laureation conceded to the University of Vienna by Maximilian I. in fact constituted what may be held a distinct faculty,—a *Collegium Poeticum*.)

Altdorf was now a privileged university, (*Academia Universalis*, *Studium Universale*,) and her graduates endowed with all the rights enjoyed by those of other universities; Cologne, Vienna, Tubingen, Freiburg, Ingoldstadt, and Strasburg, are specially referred to. Her new diploma spoke only of promotions in the Medical and Juridical faculties; but it did not prohibit them in Divinity. The notion, however, that the Senate of Nuremberg

could, on such a charter, authorize a theological faculty in their University, was found "wholly groundless; as no state of the empire" (we quote the historian of the school) "was entitled to stretch the imperial privileges beyond the clear letter of the deed of incorporation, and its immediate and necessary consequences."—Accordingly, it was not until 1697, that the Senate succeeded in obtaining from the Emperor a confirmation of the privileges previously conceded, and their extension to a Theological faculty.

Without entering on details, we may also add, that Rostoch was founded only in three faculties, the Juridical, Medical, and Philosophical; whilst Heidelberg, Prague, and, in general, the older Universities of Germany, had, like Paris and Alcalá, no faculty of Civil Law, a faculty which was afterwards granted by the competent authority. In like manner, Bamberg and Gratz had only two faculties, the Philosophical and Theological, until 1739 and 1788, respectively; when the Medical and Juridical were conceded; and Duisburg has never, we believe, possessed more than the two former. A slight research would accumulate many additional examples, [were it requisite, to refute an opinion which is disproved by the history of almost every University in Europe. It would, in fact, be idle to contend in this country, and at the present time, what seminary has or has not the privilege of granting degrees; when degrees, as granted by most of the privileged seminaries themselves, are now so justly the objects of a rational contempt.]

But to return from our digression:—The religion taught in its *Professional* Faculty cannot thus interfere with the dissenters; but in the faculty of Arts or of Philosophy,—in that fundamental faculty in which the individual, as an end unto himself, is liberally educated to the general development of his various capacities, as *man* and *gentleman*, and not as in the others, viewed as a mean, merely towards an end, ulterior to himself, and trained to certain special dexterities as a *professional* man;—in this fundamental faculty is there no religion taught?—We are far from holding, that if this were possible, it ought not to be accomplished; but we assert, and fear no contradiction, that by no university *has it ever yet been attempted*. After all the bigoted or hypocritical railing against the London University, for omitting religion in its course of general education; in point of fact, that school omits only from necessity, what *all universities* had previously omitted with-

out. Let those who stand astounded at this assertion, adduce a single instance of any university, in which religious information constituted, or constitutes, an essential element of its course of instruction in the faculty of Arts. We are certain that such an instance out of England will not be found. The slightest acquaintance with the constitution and history of the European schools supplies the reason. At present, we are satisfied with merely stating the fact. And as the sphere of examination for its degrees is necessarily correlative to the sphere of instruction by a faculty; so, in no European faculty of Arts was Theology a subject on which its examiners had a right to question the candidate. The only apparent exception is afforded by the English universities. And what is that? It is an exception but of yesterday; after the constitution of the University Proper had been subverted; its public instruction quashed; and the one private tutor left to supply the place of the professorial body. In consequence of this revolution, some thirty years ago, candidates for the first degree were, in Oxford, subjected to an examination in the rudiments of religion and the contents of the Thirty-nine Articles; and we believe that in Cambridge a certain acquaintance is required with Paley's Evidences and Butler's Analogy. Though contrary to all academical precedent, we have certainly no objection to the innovation. And when dissenters are admitted, the only change required will be, not to make the Thirty-nine Articles a necessary subject of examination in Oxford.

In so far, therefore, as the University Proper and its public instruction are concerned, the objection does not apply; if it be relevant at all, it has reference only to the domestic education in the Colleges. And in this application, we are not disposed to deny it force. Estimated indeed, by any but the lowest standard, the religious discipline afforded in the colleges of either university is scanty and superficial in the extreme; and the men, who, from their acquaintance with the theology of foreign universities, are the best qualified to estimate at its proper value what is accomplished in their own, are precisely those (we refer to Mr Thirlwall and Mr Pusey,) who speak of it with the most contempt. But insignificant as it now is, we are confident that a forcible introduction of the dissenters would not only prevent its improvement, but tend to annihilate it altogether.

But again, it is clamoured:—*By the removal of academic tests, the most influential situations in the universities may be filled with*

men, enemies not only of the established religion, but of religion altogether.

Look to the universities of Germany: there we have "the *practical effects*," (says the Christian Advocate of Cambridge, who, not merely in honour of his office, must be allowed to lead the battle,*)—"the *practical effects* of the system, where religious tests have been either *virtually* or *actually* abolished, or dispensed with altogether."—"In these learned institutions, I am not aware that any religious test is exacted before admission to degrees and professorships; and before admission to holy orders and degrees in divinity, nothing more is required than a subscription to what are called the symbolical books of the Lutheran Church, and even to these, with this convenient qualification, *as far as they agree with Holy Scripture*; 'a qualification,' as it has been observed, 'which obviously bestows on the ministry the most perfect liberty of believing or teaching whatever their own fancy may suggest.' And the consequences of this latitude have been most fatal in their influence on the German Universities and the Lutheran church. Opinions have not only been maintained by the most eminent persons in these learned bodies, but have been *openly propounded even from the Professorial chairs*, which are entirely at variance with our belief of the inspiration of the Holy Scriptures."

Now, does Mr Pearson, or his informant, Mr Rose, imagine that subscription to the Symbolical Books (never, by the bye, generally received even in *Lutheran* Germany,) was proposed "with this convenient qualification" of a *quatenus*, &c.? This is merely the *sense* in which acquiescence to their doctrine is understood by the person subscribing;—a sense which, it is contended by the most pious and orthodox divines, must by its very nature

* "The Danger of Abrogating the Religious Tests and Subscriptions which are at present required from persons proceeding to Degrees in the Universities, considered, in a Letter to His Royal Highness the Duke of Gloucester, K.G., Chancellor of the University of Cambridge. By George Pearson, B.D., Christian Advocate in the University of Cambridge. Cambridge: 1834."—The same argument forms the principal staple of the pamphlet entitled, "The Cambridge Petition Examined; or Reasons against admitting the Dissenters to Graduate in the Universities: With remarks on Clerical subscription, and the necessity of a Church Establishment. London: 1834."—This argument also was strongly insisted on, among others, by the Earl of Caernarvon and Mr Goulburn, in their speeches on the question in the several Houses of Parliament.

be involved in *every Protestant* obligation to religious conformity. We need only mention two,—Spenser the Pietist, and Reinhard, the most powerful champion of Supernaturalism. Melancthon, himself the author of the two principal Symbolical Books, professes, as he practised, that “articles of faith should be frequently changed, in conformity to times and circumstances.” The German doctrine of Protestant subscription is not less applicable to the Thirty-nine Articles than to the Symbolical Books; and what is universal in the one country, may soon become no less prevalent in the other. This of itself is a powerful argument for the abolition of so frail a barrier,—were that barrier in itself expedient.—Nay, in point of fact, *this theory of subscription is the one virtually maintained by the most distinguished divines of the English Church and Universities.* We shall quote only one Anglican authority, but that one, on the question, worth a host of others.—Bishop Marsh, the learned Margaret Professor of Divinity in the University of Cambridge, and whom no one assuredly will suspect of aught but ultra reverence to the Church of England and her Articles, thus expounds the obligation of those who have not only subscribed these articles, but devoted themselves to minister at the altar:—“As *our* Liturgy and Articles are avowedly *founded* on the Bible, it is the special duty of those, who are set apart for the ministry, to *compare* them with the Bible, and see that their pretensions are *well* founded. But then our *interpretation* of the Bible must be conducted *independently* of that, of which the truth is to be *ascertained* by it. Our interpretation of the Bible, therefore, must not be determined by *religious system*: and we must follow the example of our reformers, who supplied the place of Tradition by *Reason* and *Learning*.” The italics are not ours.

But to return to Mr Pearson:—“For instance,” says he, “Rosenmüller in the first edition of his ‘Commentary on the Old Testament,’ the most valuable in existence, perhaps, considered as a critical and philological commentary on the Hebrew text, speaks of the Creation, the Fall, and the Deluge, as Fables.” (*Fable* is a most unfair or a most ignorant conversion of *Mythus*. Mr P. goes on:—“He (Rosenmüller) describes the history of Jonah to be a mere repetition of the *Mythus* of Hercules, swallowed by a sea-serpent; and he says that it was not written by Jonah, but by some one contemporary with Jeremiah; and he considers the prophecy of Isaiah as made up by one writer out of

the minor works of several others. Gesenius, the Professor of Theology at Halle, maintains after Paulus, Professor at Wurtzburg, that the Pentateuch was composed *after the time of Solomon*, out of different fragments which were collected together." (Not Paulus, but Vater and De Wette, were, among the modern German critics, the first and contemporaneous promulgators of the theory in regard to the compilation of the Pentateuch subsequently to the kings of Israel; and Eichhorn after Astruc, was the first to maintain, what even Catholic divines, e. g. Jahn, admit that he has made out, the fragmentary composition of Genesis, &c. Long before Astruc, however, Aben Ezra, Spinoza and others, had denied Moses to be author of the Pentateuch. Mr P. goes on:—“Bauer, in his introduction to the Old Testament, has a chapter on what he calls the *Mythi* or *fables* [fables again] of the Old Testament.” (Bauer has not only a *Chapter*, but a famous *Book* in two volumes, now more than thirty years old, entitled, “*Hebrew Mythology of the Old and New Testaments*,” &c. Mr P. proceeds:—“Bretschneider rejects the Gospel of St John, as the work of a Gentile Christian of the second century.” (Bretschneider did not reject, but only proposed for discussion, *Probabilia* against it; and he has since candidly admitted his tentative to have been satisfactorily refuted. Mr P. concludes:—“Eichhorn pronounces the Revelations to be a drama representing the fall of Judaism and Paganism; while Semler condemned it entirely as the work of a fanatic.” (Of this last again.)

Our present argument does not require us to enter on the merits or demerits of the German Theology; on his knowledge of which we, certainly, cannot compliment the Christian Advocate of Cambridge. But we have no objection whatever that he should make his bugbear look as black and grisly as he can; we shall even hold it to be a veritable Goblin. Still, admitting his premises, we shall show that there is no consequence in his conclusion.

In the *first* place, Mr Pearson *assumes* the whole matter in dispute, and that not only without, but against experience.—Admitting all that he asserts in regard to the character of German theology, yet to render this admission available to him, he was bound to show that this character was the natural, at least ordinary, consequence of the removal of academic tests; by proving,—1°, that there was no other cause in the circumstances of Germany which might account for the phenomenon; and 2°,

that the same phenomenon had occurred in all other countries where the same academic liberty had been permitted. He attempts to prove neither, but assumes both.—Yet in regard to the first, it could easily be established, by demonstrating the real causes of the theological revolution in Protestant Germany,—that the relaxation of academic tests had no influence whatever in its production.—And in regard to the second, it is sufficient to say, that no universities, except the English, have ever denied their education and degrees to the members of every sect; and that in many, even of *Catholic* and Italian universities, professorships in all the faculties, except the theological, were open to the partisans of different faiths; and this too for centuries before such liberality was even dreamt of in the ultramontane and German universities. But did the alleged consequence ensue? That, no one can maintain. Indeed, the exclusive reference to the German universities, is of itself an implicit admission that the experience of the *other* European universities, equally emancipated from religious restrictions, is in contradiction to the line of argument attempted. We may mention, that so little has Holland, a country at once intelligent and orthodox, been convinced of the evil consequences of academic freedom, that it has recently dispensed with the signature of the Confession of Dordrecht, to which all public teachers were hitherto obliged; and Leyden now actually boasts of Catholic Professors as ornaments of her Calvinist School.

In the *second* place, all the examples of dangerous doctrine which Mr Pearson alleges are from the works of members of the *theological* faculty in the German universities; but admission into that faculty was never proposed, nor dreamt of, in the English universities, without the former test. The instances have, therefore, *no relevancy*. In point of fact, those who know any thing of the progress of philosophy and theology in Germany, know this:—that the rationalism of the theologians has been not a little checked and scandalized by the supernaturalism of the philosophers.* Were we logicians like the advocate, we might,

* [See (instar omnium) the treatise "De Miraculis enchiridion," &c. The author, Christian Frederic Boehme, is or was a distinguished *theologian*, latterly Pastor and Inspector of Luckau. He maintains, that miracles are impossible, are not even conceivable; and though, otherwise, a Kantian, impugns Kant, Fichte, and the German *philosophers*, for asserting a more orthodox doctrine.]

from this phenomenon contend, that religious tests are the means of causing infidelity ; the German theologians being alone compelled to subscribe to the confessions of the Lutheran and Calvinistic churches.

But, in the *third* place, to bear upon the question, it is, and must be, presumed, that the alleged licentious speculation is the *effect of the removal* of all imposed fetters on the full exercise of religious inquiry. Yet that this is the natural result of a vigorous and unimpeded Protestantism, Mr Pearson does not admit. "Such opinions as these are not the natural produce of the German universities,—the cradle of the Reformation,—spots consecrated by the recollections of men, 'whose praise is in all the churches,' and whose names live in the pages of history amongst the greatest benefactors of mankind ! But in *these very* places have we seen opinions advanced, which are opposed to the fundamental doctrines of the revealed will of God !" — In a subsequent page, he actually makes it a weighty matter of reproach against the London University, that Professor Muehlenfels, in an "Introduction to a Course of German *Literature*," should "speak of (Luther) the *champion of our faith*, merely as an historical and *literary personage*."

We are afraid, however, that the Christian Advocate is hardly better versed in the works of the "champion of our faith," than in those of the men whom he boldly represents as its most formidable antagonists. We can easily show, even to Mr Pearson's own contentment, that there is hardly an obnoxious doctrine to be found among the modern Lutherans, which has not its warrant and example in the writings of Luther himself ; and admitting this, even the Advocate, we think, would deem it idle to explain, by so far-fetched and inadequate an hypothesis as the want of academic tests, what is nothing more than the natural exercise of that license, vindicated, not surely to himself exclusively, by the "great champion of our faith." "Idemne lieuit," says Tertullian, "Valentinianis quod Valentino ; idemne Marcionitis quod Marcioni :—*de arbitrio suo fidem innovare ?*" The following *hasty* anthology of some of Luther's opinions, and, in his own words, literally translated, may render it doubtful, whether the heresies of his followers are to be traced no higher than to the relaxation (not a century old) of religious tests. [We must not, however, set down Luther for a rationalist, howbeit the rationalists may adduce Luther's practice as the precedent of their own.

For, while far from erring through any overweening reliance on the powers of human reason in general, still Luther was betrayed into corresponding extravagancies by an assurance of *his personal inspiration*, of which he was, indeed, no less confident than of his *ability to perform miracles*. He disclaimed the Pope, he spurned the Church, but varying in almost all else, he never doubted of his own *infallibility*. He thus piously regarded himself, as the authoritative judge, both of the meaning, and of the authenticity, of Scripture. Yet though it is our duty, in refuting an untenable hypothesis, to allege various untenable and even obnoxious opinions of the great reformer; so far from entertaining any dislike of Luther, we admire him, with all his aberrations, (for he never paltered with the truth,) not only as one of the ablest, but as one of the best of men. Only, in renouncing, with Luther, the Pope, we are certainly not willing to make a Pope of Luther.]*

L.) *SPECULATIVE THEOLOGY*.†—"God pleaseth you when

* [In stating the truth regarding Luther, I should regret to be thought by any, to utter aught in disparagement of Protestantism. Protestantism is not the doctrine of this or that individual Protestant; and with reference even to the man Luther, I am sorry that it is here incumbent on me, to notice his faults without dwelling on his virtues. That what is now to be alleged, should not long ago have been familiar to all, only shows that Church History has not yet been written, as alone written it ought to be,—with *truth and knowledge*. Church History, falsely written, is a school of vain glory, hatred, and uncharitableness; truly written, it is a discipline of humility, of charity, of mutual love. Written in a veracious and unsectarian spirit, every religious community is herein taught, that it has cause enough to blush for its adherents,

("Iliacos intra muros peccatur et extra;")

and that others, though none be perfect, are all entitled to respect, as all reflections, though partial reflections, of the truth. Ecclesiastical History, indeed, may and ought to be the one best, as the one unexclusive, application of religious principle to practice,—at once Catholic and Protestant and Christian: vindicating to the Church at large its inheritance of authority; manifesting the fallibility of all human agents, nor substituting merely one papacy for another; whilst yielding "Christ the truth," as its last and dominant result.]

† [In regard to the testimonies from Luther under this *first* head—but under this *alone*,—I must make a confession. There are few things to which I feel a greater repugnance, than relying upon quotations at second hand. Now, those under this head were not taken immediately from Luther's treatise *De Seruo Arbitrio*, in which they are all contained. I had, indeed, more than once read that remarkable work, and once attentively, marking, as is

he crowns the unworthy ; he ought not to displease you when he damns the innocent." [Jena Latin, iii. f. 207.]—" All things

my wont, the more important passages ; but at the time of writing this article, my copy was out of immediate reach, and the press being urgent, I had no leisure for a reperusal. In these circumstances, finding that the extracts from it in *Theoduls Gastmahl*, corresponded, so far as they went, with those also given by Bossuet, and as, from my own recollection, (and the testimony, I think, of Werdermann,) they fairly represented Luther's doctrine ; I literally translated the passages, *even in their order*, as given by Von Stark, (and in Dr Kentsinger's French Version.) Stark, I indeed now conjecture, had Bossuet in his eye. I deem it right to make this avowal, and to acknowledge, that I did—*what I account wrong*.—But again, I have no hesitation in *now*, *after full examination*, deliberately saying:—that I do not think these extracts, whether by Bossuet or by Stark and Bossuet,—to be unfairly selected,—to be unfaithfully translated,—to be garbled,—or to mis-represent in any way Luther's doctrine, in particular his opinions touching the divine Predestination and the human Will. On the contrary, the impression which they leave, is not harsher than that left by a fair summary of the work in question, made even by zealous Lutheran divines. This is shewn by the following extract ; which is taken from a Consilium of the *Theological Faculty of Rostoch*, addressed (in 1595) to the Theological Faculty of Wittenberg, and given by Walch in his Works of Luther (xviii. 130.) The learned Divine, Historian and Philosopher, *David Chytraus*, was the penman.

"You are aware that at the commencement of the religious Reformation, and in your own ecclesiastical metropolis of Wittenberg, established by Luther some seventy years ago, when the Liberty of the human Will was strenuously attacked, there were many points of this very doctrine of Predestination made matter of revolting controversy and assertion. To wit:—That the divine predestination is the denial of all liberty of will to man, both in external operation and in internal thought ;—That all things take place by necessity, and an absolute necessity, so that as speaks the poet, [Manilius, 'Fata regunt orbem,] certa stant omnia lege' ;—That there is no contingency in human affairs ;—That whatever God foresees, that he wills ;—That Pharaoh was hardened, not by the permission, but by the efficacious action of God. Through six consecutive pages it is maintained, that the declaration,—'I have no pleasure in the death of the wicked, but that the wicked turn from his way and live,' is the voice of the *revealed* God ; but that there is another judgment of the *concealed* God, who wills that Pharaoh should perish."—To the same effect, Walch gives various quotations from Calixtus, the greatest perhaps of all Lutheran divines ; and if Luther (what I think he did) did not abandon his older doctrine on the point, this was at least openly done, in Luther's lifetime, and without Luther's reclamation, by Melancthon.

Though I refrain from here enlarging on the subject, I shall add one passage of Luther himself, which, in a few words, significantly expresses the Manichean character of his doctrine of the human Will and its relations, as maintained in his treatise *De Servo Arbitrio*.

"Thus the human Will rests *indifferent* between the contending parties.

take place by the eternal and invariable will of God, who [which] blasts and shatters in pieces the Freedom of the human Will."

Like a hackney, if mounted by God, it wills and wends whithersoever God may will; if mounted by Satan, it wills and wends whithersoever Satan may will: *neither hath it any liberty of choice* to which of the two riders it shall run, which it shall affect; but the riders themselves contend for its acquisition and possession." (Jena Latin, iii. f. 171.)

In this note, I have spoken of *Bossuet*, signifying my reliance on the accuracy of his quotations; and I am as fully convinced of his learning and veracity, as of his genius. Archdeacon HARE, (who has done me the honour to devote *seventy-five* ample pages of an excursus appended to his book called "The Mission of the Comforter," in refutation of my statements touching Luther, a refutation which, as far as necessary, I shall consider in the sequel,)—Mr Hare never loses an opportunity of attacking, after his fashion, "the Eagle of Meaux."—"Impar congressus Achilli." To speak, indeed, accurately, our assailant only dreams an attack; his pugnacity merely combats a phantom of his own. Professing to refute, the Archdeacon is rarely competent to understand, the Bishop; and as for Luther, the Reformer's doctrine is always misrepresented, and not unfrequently reversed, by his self-constituted champion. An excellent example of this is exhibited, when Mr Hare makes his first and principal attack on Bossuet, (p. 664, sq.); and here, in place of the triumph which he so loudly proclaims, from a total unacquaintance with Luther's great doctrine of Assurance, Mr Hare only shows how utterly he misconceives the scope of Bossuet's criticism of the Reformer. As this is an important and, at the same time, an ill understood matter, I may be allowed a few words in explanation.

Assurance, Personal Assurance, Special Faith, (*the feeling of certainty* that God is propitious to *me*,—that *my* sins are forgiven, *Fiducia*, *Plerophoria* *Fidel*, *Fides Specialis*.)—Assurance was long universally held in the Protestant communities to be the criterion and condition of a true or *saving Faith*. Luther declares, that "he who hath not Assurance spews Faith out;" and Melancthon, that "Assurance is the discriminating line of Christianity from Heathenism." Assurance is, indeed, the punctum saliens of Luther's system; and an unacquaintance with this, his great central doctrine, is one prime cause of the chronic misrepresentation which runs through our recent histories of Luther and the Reformation. Assurance is no less strenuously maintained by Calvin; is held even by Arminius; and stands, essentially, part and parcel of all the Confessions of all the Churches of the Reformation, down to the Westminster Assembly. In that Synod Assurance was, in Protestantism, for the *first*, indeed *only*, time formally declared, "*not to be of the essence of Faith*;" and accordingly, the Scottish General Assembly has, subsequently, once and again, condemned and deposed the holders of this, the doctrine of Luther, of Calvin, of all the other Churches of the Reformation, and of the older Scottish Church itself. In the English, and, more articulately, in the Irish Establishment, Assurance still stands a necessary tenet of ecclesiastical belief. (See *Homilies*, Book I., Number iii., Part 3, specially referred to in the *Eleventh* of the *Thirty-nine Articles*, and Number iv., Parts 1 and 3; likewise the *Sixth Lambeth Article*.) Assurance

[F. 165.]—"God creates in us the evil, in like manner as the good." [Ff. 170, 216.]—"The high perfection of faith, is to believe that God is just, notwithstanding that, by his will he renders us necessarily damnable, and seemeth to find pleasure in

was consequently held by all the older Anglican Churchmen, of whom Hooker may stand for the example: but Assurance is now openly disavowed, without scruple, by Anglican Churchmen high and low, when apprehended; but of these, many, like Mr Hare, are blessedly incognisant of the opinion, its import, its history, and even its name.

This dogma, with its fortune, past and present, affords indeed a series of the most *curious contrasts*.—For it is curious, that this cardinal point of Luther's doctrine should, without exception, have been constituted into the fundamental principle of all the Churches of the Reformation, and as their common and uncatholic doctrine, have been explicitly condemned at Trent.—Again, it is curious, that this common and differential doctrine of the Churches of the Reformation, should now be abandoned virtually in, or formally by, all these Churches themselves.—Again, it is curious, that Protestants should now generally profess the counter doctrine, asserted at Trent in condemnation of their peculiar principle.—Again, it is curious, that this the most important *variation* in the faith of Protestants, as, in fact, a gravitation of Protestantism back towards Catholicity, should have been overlooked, as indeed in his days undeveloped, by the keen-eyed author of "The history of the Variations of the Protestant Churches."—Finally, it is curious, that, though now fully developed, this central approximation of Protestantism to Catholicity should not, as far as I know, have been signalled by any theologian, Protestant or Catholic; whilst the Protestant symbol, (*Fides sola justificat, Faith alone justifies*.) though now eviscerated of its real import, and now only manifesting an unimportant difference of expression, is still supposed to mark the discrimination of the two religious denominations. For both agree, that the three heavenly virtues must *all* concur to salvation; and they only differ, whether Faith, *as a word*, does or does not involve Hope and Charity. This misprision would have been avoided had Luther and Calvin only said—*Fiducia sola justificat, Assurance alone justifies*; for on their doctrine Assurance was convertible with true Faith, and true Faith implied the other Christian graces. But this primary and peculiar doctrine of the Reformation is now harmoniously condemned by Catholics and Protestants in unison.

As to the Archdeacon, he consummates the climax, by adding *two*, and two of the strangest, to the other five curiosities of the series.—For, (to say nothing of his mutilated quotations), it is passing curious, that Mr Hare should reprehend Bossuet for "grossly misrepresenting" Luther, while Mr Hare, misunderstanding, only "grossly misrepresents" Bossuet.—And it is above all curious, that Mr Hare should reproach Bossuet, for attributing to Luther what is, in fact, the *very cardinal point* of Luther's doctrine.—Such is the first of the Archdeacon's polemical exploits, and the sequel of his warfare is not out of keeping with the commencement.]

the torments of the miserable." [F. 171.])—All from the treatise *De Servo Arbitrio*.]*

* [Mr Hare's observations under this head of Speculative Theology, (p. 807-812,) exhibit significant specimens of *inconsistency*, *bad faith*, and *exquisite error*. I shall adduce instances of each. But his baseless abuse—that I shall overpass.

INCONSISTENCY.—There are several others, but to take only a single example. Mr Hare, on the one hand, thus concludes his observations upon this head:—"What a testimony is it to the soundness of Luther's doctrines, that this *knot of garbled sentences, thus twisted and strained* from their meaning, are all that so unscrupulous an enemy (!) has been able to scrape together against him, under the head of Speculative Theology!" On the other hand, in the page immediately preceding (811), Mr Hare asserts, that this "so unscrupulous enemy" had "*never set eyes on the original Latin of any one of these four sentences*,"—all that he "had been able to scrape together" being *contentedly* taken from "*one page* of Bossuet." Mr Hare does not think with the more logical poet,—

"Self-contradiction is the sin of sins."

BAD FAITH.—Mr Hare states, that the passages in question are taken from Bossuet; and, at the same time, he parades his own familiarity with the works of Luther, in the discovery of these recondite fragments in the voluminous writings of the Reformer. "*We may guess*," he says, "that the quotation comes from the *Treatise De Servo Arbitrio*," because, &c.; and after boldly asserting that the sentences of the quotation "*seem to form one continuous passage*," he adds,—"*but when we look through that treatise, we discover, to our surprise*, that they are culled from various parts of it," &c.; then he charitably admits,—"*I daresay* the Reviewer himself did *not know* this;" and finally concludes by informing the "*perhaps thankful* Reviewer" of the different pages of the third volume of the Jena [Latin] edition, on which "*he will find*" them.—Now, can it be believed, that there could have been *no* "*guessing*" in the case, *no* "*discovery*," and *no* "*surprise*;" that the Venerable Archdeacon could not have *thought*, whatever he may "*say*, that the Reviewer did *not know* this," and would be "*thankful*" for the information so graciously vouchsafed towards "*finding*" and "*seeing* the originals of his quotation?" Instead of the active development of erudition and sagacity, which he here pretends, in truth, our conscientious polemic only passively follows, though industriously concealing, the references of Bossuet. Bossuet states the treatise, and artienately marks, for each several quotation, the page and volume of the Wittenberg Latin edition of Luther's works; and this, being given, the corresponding page of every other edition is at once shewn by Waleh's comparative table;—a table of which Mr Hare acknowledges the possession. On the other hand, where Bossuet, on one occasion, forgets a reference, there we forthwith find the Archdeacon at fault. In point of fact, our champion of Luther exhibits on *this*, as indeed on every occasion, his ignorance, not only of all others, but even of Luther's greatest and most obtrusive work; his knowledge of it being confined to a dipping into this or

that passage by the aid of references,—references which he thinks it not improper carefully to suppress. And yet this Venerable and venerated Churchman does not scruple to accuse of—"FALSEHOOD" those who would deem themselves disgraced, had they been guilty, even in thought, of a simulation similar to this,—howbeit not in danger of being ignominiously plucked for so contemptible a daw-dressing.—Sufficient for the present. But we shall have occasion, in the sequel, to exhibit specimens more than enough, of Mr Hare's usual style of misrepresentation.

ELABORATE ERROR.—The whole tenor of Mr Hare's criticism shows, not only that he is, specially, unacquainted with the contents and purport of the book on the Boudage of the Will, but that he is, generally, incapable of following and accepting truth, for its own sake. He is only a one-sided advocate,—an advocate from personal predilection and antipathies; and, even as such, his arguments are weak as they are wordy. I can afford only a single specimen of this, and I select the shortest.—Luther says:—"Hic est fidei summus gradus, credere illum esse - - - - justum, qui *sua voluntate nos necessario damnabiles facit.*" These words might be supposed plain enough; but the following is Mr Hare's version:—"This is the highest pitch of faith - - - - to believe in the justice of God, who by His will *creates us*, though by the necessity of our fallen nature we become inevitably subject to condemnation, without the special help of His spirit." Here, it is evident that Luther's meaning is wholly changed,—being, in fact, precisely reversed. Luther says, and intended to say, that "God by His will makes us necessarily damnable;" that is, that the quality of damnability in us is necessary, and necessary through the agency of His will. This meaning, I make bold to say,—no one but Mr Hare ever thought of disallowing; for this is the meaning exclusively conformable with the analogy of Luther's treatise. And so accordingly Bossuet converts the clause:—"quoiqu'il nous rende nécessairement damnables par sa volonté." This Mr Hare declares a "*mistranslation*," by which he charitably admits that "Bossuet may relieve the Reviewer from a part of his GUILT!" But in this *guilt* all the world, with exception of the Archdeacon, is participant. Let us look into any version of this work of Luther,—and the two at hand chance to be of these the first and the last.—The first is that of Justin Jonas, the friend, colleague, and coadjutor of Luther, a version published under the author's eye, and almost immediately after the original. And *Jonas is guilty*. The opinion of Jonas upon the subject is, indeed, expressed in the very title of his translation:—"Dass der freye Wille nichts sey," ("That Free Will is a nullity.") His rendering of the clause in question is as follows:—"glauben, dass der Gott gleichwol der gerechteste sey, *dass Wille also stehet, dass etliche müssen verdammt werden.*"—The last is by the Rev. Mr Vaughan, who, like Mr Hare himself, was "sometime Fellow of Trinity College, Cambridge," and he thus *guiltily* translates the clause:—"to believe Him just, who of *his own will makes us necessary objects of damnation.*" And in the relative note, Mr Vaughan says:—"This necessity is not blind fate, but arises out of the appointments, arrangements, and operations of God's counselled will."—Finally, (though this be wholly superfluous,) to refer to the German theological philosophers, *they also are guilty*. Werdermann, who may represent all, states it in his Theodisee, (*the guilty criminal!*) as Luther's doctrine:—"Faith can and

II.) *PRACTICAL THEOLOGY.* * — “We,” (Martin Luther,

must hold God, not only for just but merciful, were He even to damn all men without exception;” and:—“God’s prescience and man’s free will are mutual contraries, like fire and water.” (iii. 138.)

Such is a sample of the laborious blundering, by which the “Megalanders” is to be clipped down to the shape and dimensions of Mr Hare’s model of propriety,—and a neighbour ostensibly inculcated.—The Reformer, here as elsewhere, is made to say one thing, (so understood by *all*,) to mean, and to mean to say, another, (so understood by Mr Hare *alone*.) But, was Luther an idiot?—weaker than a dotard in thought, weaker than an infant in expression? Luther, than whom no one ever thought more clearly, no one ever expressed his thought less ambiguously or with greater force?—But if the Reformer be not fortunate in his defender; more unhappily for himself, Mr Hare’s Christian charity does not redeem the defects of his logic and his learning. Lord Bacon, (in his book On Controversies,) says of some one: “—has only two small wants; he wants Knowledge, and he wants Love.” But with the Archdeacon we cannot well restrict his wants to two; for he lacks Logic besides Learning and Love; and a fourth—withal a worse, defect—is to be added, but a defect which it is always painful to be forced to specify.

I must not, however, here forget to acknowledge an error, or rather an inadvertence of mine, which has afforded a ground for Mr Hare to make, as usual, a futile charge against Bossuet. In the second of the above extracts, not having Luther’s original before me, I had referred the relative pronoun to “*God*,” whereas it should have been to “*the will of God*.” In the versions of Stark and Bossuet it is ambiguous, and I applied it wrongly. The matter is of the smallest; but as Mr Hare has dealt with it as of consequence, he should not have calumniously asserted, that Bossuet was in meaning different, and intentionally different, from Luther.]

* [On this head I cannot here enter; nor is there need. In his fifty pages of dense typography and, as he himself confesses, of “prolix garrulity,” though Mr Hare has not been able to shake (for he has not even touched) a single of my statements; he has succeeded admirably in manifesting his own common ignorance of the whole matter. Yet in the presumption of this ignorance, Mr Hare has not hesitated to scatter reproaches and to insinuate calumnies,—calumnies, of which, by a righteous retribution, he has, in fact, personally been doomed to feel the injustice. Himself, and for himself, I hear that he has been fain to vociferate,—“*Thou shalt not bear false witness against thy neighbour*;” but I have never heard that he has yet fulfilled the one preliminary duty of a christian,—withdrawn, acknowledged and repented the false witness which he had himself so borne.—In a moral relation, perhaps, more than in any other, the history of Luther and the Reformation has been written, only as a conventional romance; and I know not, whether Catholics or Protestants have wandered the widest from the line of truth. Of the following general facts I hold *superfluous* proof.

1°. After the religious revolution in Protestant Germany, there began and long prevailed a fearful dissolution of morals. The burthen of Luther’s

Philippus Melancthon, Martin Bucer, Dionysius Melander, John Leining, Antonius Corvinus, Adam Kraft, or of Fulda, Justus

lamentation is: "Under the Papacy, we were bad, but under the Gospel, we are seven—yea more than seven times worse;"—a contrast which he usually signalises by the parable of the "one unclean spirit returning and taking with him seven other spirits, each more wicked than himself."

2^o, Of this moral corruption there were two principal foci,—Wittenberg and Hesse.—Shortly before his death, Luther abandoning, calls Wittenberg "a Sodom;" and not long after it, Wittenberg is formally branded by Simon Musæus, the Professor of Theology and Superintendent of Jena, another Protestant, another German, another Saxon, University, as "*fœtida cloaca Diaboli*."—Touching Hesse, the celebrated Walther, writing to Büllinger, before the middle of the century, says of its centre of learning and religious education:—"In Marburg the rule of morals is such, as Bacchus would prescribe to his Maenads, and Venus to her Cnids;" while from Marburg and the chief chair of Theology in that University, (what is unknown to his biographers,) the immorality of the natives had previously determined, as he writes, the pious Lambert of Avignon to fly, his flight being, however, arrested by his sudden death.

3^o, The cause of this demoralization is not to be sought for in the religious revolution itself; for in Switzerland and other countries the religious revolution resulted in an increased sobriety and continence. In Protestant Germany, and particularly in Saxony, we need look no farther than to the moral doctrine of the divines;

("Hoc fonte derivata clades
In patriam populumque fluxit:")

but in Hesse, beside that influence, we must take into account the pattern of manners set to his subjects by the prince;

("Regis ad exemplum totus componitur orbis.")

4^o, As to Polygamy in particular, which not only Luther, Melancthon, and Bucer, the three leaders of the German Reformation, speculatively adopted,—but to which above a dozen distinguished divines among the Reformers stood formally committed; there were two principal causes which disinclined the theologians to a practical application of the theory.—The first of these, which operated more especially on Luther and Melancthon, was the opposition it was sure of encountering from the Princes of both branches of the house of Saxony.—The second, that the doctrine itself was taken up and carried out to every extreme by odious sects and odious divines; in a word, it had become fly-blown. The Sacramentarian Carlstadt's public adoption of it, tended principally to disgust Luther, and in a less degree Melancthon; for Carlstadt's doctrines were, in the mass, an abomination to these two reformers: but the polygamist excesses of the hated Anabaptists, in the last season of their reign in Münster, revolted all rational minds; and, as I said, (what Mr Hare strangely misunderstands,) homœopathically broke the force of the epidemic throughout Germany and Europe.

Specially: the Landgrave's bigamy has been mistaken in its more essential

circumstances, from a want of the requisite information, both by Protestant and Catholic writers; and by none almost more than by the recent editor of the *Corpus Reformatorum*, Dr Bretschneider. Touching this transaction, I shall now state in general a few of the more necessary facts; of which, however startling, I have irrecusable proof,—proof which, before long, I may fully detail, as indeed I ought ere this perhaps to have done.

The sanction of Luther and Melancthon to the Landgrave's second marriage was compelled. Prudentially, and for special reasons which I shall not now enumerate, they were strongly averse from this proceeding, on the part of that Prince; but *on principle*, they, unfortunately, could not oppose it. They had both promulgated opinions in favour of polygamy, to the extent of vindicating to the spiritual minister a right of private dispensation, and to the temporal magistrature the right of establishing the practice, if he chose, by public law. They had even tendered (what is unknown, though the consultation has been published for centuries, to all English historians,)—tendered their counsel to Henry VIII., advising him, in his own case, to a plurality of wives. Without, however, shewing at present how the screw was actually applied, I may notice generally: that their acquiescence was extorted, through Martin Bucer, a reformer and man of genius only inferior to themselves; whilst the proceeding of the Landgrave was zealously encouraged, and the scruples of the second Landgravine effectually overcome, by the two court preachers, the two courtly chaplains, Dionysius Melander and John Lening; Melander and Lening being also the Pastors of the two parishes where lay the princely residences of Cassel and Melsingen, therefore were they, in all respects, the appropriate spiritual advisers of their territorial lord. Thus these three divines, apart from the Prince, were the prime movers in this scandalous affair; and in contrast to them, Luther and Melancthon certainly shew in favourable relief.

Bucer (Butzer, Putzer, Felinus),—"Cat by name, and Cat by nature," the lesser Martin had previously merited from Luther the character of "*lying varlet*;" and he consistently displays himself in the sequel of this business as guilty of MENDACITY in every possible degree. To those, however, acquainted with the real history of the Reformation, Bucer is known, with much ability and many amiable qualities, as, in fact, the *âme damnée* of that revolution. But he was not, at least a simultaneous polygamist, as asserted by some Catholic historians.

Dionysius Melander (Schwartz) did not belie either his name or his surname. Though an eloquent preacher, and "the Reformer of Frankfurt," yet was he as worthy a minister of *Bacchus*, as an unworthy minister of Christ; professing as he did, "*that he lived and wished to live only for the taste of wine*." Neither shall we marvel how a Protestant Bishop, Superintendent, Inspector, like Melander, could bestow the spiritual benediction on his master's bigamy; when aware of the still higher marvel, that Melander the Inspector, Superintendent, Protestant Metropolitan of Hesse, was (the moral *negro*!) at and before the time, himself a TRIGAMIST, that is, to avoid all possible ambiguity, the husband of three wives at once. The Prince thus followed at a distance, not only the precept, but the example of the Pastor.

John, or, as the reverend divine was very irreverently called, *Leno* Len-

*Winther, Balthasar Raida,**)—"we cannot advise that the license of marrying more wives than one be publicly introduced, and, as it were, ratified by law." (Such legislation, in fact, no dependent Prince—no feudatory of the Empire was warranted to authorize.) "If any thing were allowed to get into print on this head, your Highness" (Philip, Landgrave of Hesse, champion of the Reformation, who,—having lost, as he pleads, conceit of his wife, being touched with scruples of conscience at his adultery, but which he [*thrice*] admits that "*he does not wish to abstain from*," and "knowing," as he tells themselves, "of Luther and Melancthon having exhorted the King of England not to divorce his first queen, but to marry a second over and above,"—had applied to the leading doctors of the Reformation for their spiritual sanction to take another wife,)—"your Highness easily comprehends that it would be understood and received as a precept, whence much scandal and many difficulties would arise. . . Your Highness should be pleased to consider the excessive scandal; that the enemies of the Gospel would exclaim, that we, like the Anabaptists, have

ing, seems, with both learning and ability, to have been a Pandarus and Caliban in one; so that the epithets of "monster," &c. applied to him by Luther and Melancthon, suited indifferently his deformities moral and physical. The Pastor of Melsingen was, as Melancthon informs us, like his Prince, a *syphilitic* saint, (nor touching either Prince or Pastor, do I found on any testimony, hitherto adduced, on any testimony, euphemistic or ambiguous); and this worthy undertook the congenial task of converting Margaret von der Sahl to the new faith of Polygamy. The precious book, indeed, which, for the purpose he composed and sanctimoniously addressed to that "virtuous Lady and beloved sister in Christ," is still extant. If an adulterer, Lening does not appear, like his fellow-labourer Melander, to have been, in practice at least, a simultaneous polygamist; but when left a veteran widower, of more than seventy, "the Carthusian monster" incontinently married a nursery girl, Barbara Biedenkap, as I recollect by name, from the household of his pervert, "the left Landgravine," and keeper of her eighth child.

With such precept and such example, we shall not be surprised, that the Hessian morals became soon notoriously the most corrupt in Germany, I ought, perhaps, to say, in Christendom.]

* [The list of the divines who concurred in the Landgrave's bigamy is here given more fully and accurately than in the Review; more fully and accurately even (though without the synonymes) than in any other relative publication,—and of such I am now acquainted, I believe, with *all*. The Consilium was drawn up by Luther and Melancthon at Wittenberg, 19th December 1539. It was then signed by Bucer; and afterwards in Hesse, by the other six divines, who were all subjects of the Landgrave.]

adopted the practice of polygamy, that the Evangelicals, as the Turks, allow themselves the indulgence of a plurality of wives. . . . But in certain cases there is room for *Dispensation*. If any one (for example) detained captive in a foreign country, should there take unto himself a second wife for the good of his body and health ; . . . in these cases, *we know not* by what reason a man could be condemned, who marries an additional wife, with the advice of his Pastor, not for the purpose of introducing a new law, but of satisfying his own necessity. . . . In fine, if your Highness be fully and finally resolved to marry yet another wife ; we judge, that this ought to be done *secretly*, as has been said above, in speaking of the Dispensation, so that it be known only to your Highness, to the Lady, and to a few faithful persons obliged to silence, under the seal of confession ; hence no attacks or scandal of any moment would ensue. For there is nothing unusual in princes keeping *concubines* ; and although the lower orders may not perceive the excuses of the thing, *the more intelligent know how to make allowance.*" *

* The nuptials were performed in presence of these witnesses,—*Melanchthon, Bucer, Melander* [who officiated, *Raida*, who acted as Notary,] with others ; and *privately*, in order, as the marriage-contract bears, "to avoid scandal, seeing that, in modern times, it has been unusual to have two wives at once, although in *this case it be Christian and lawful.*"—The Landgrave marvellously contrived to live in harmony with both his wives, and had a large family by each. The date of the transaction is the end of 1539. The relative documents were published in 1679, by the Elector Palatine, Charles Lewis, and are said to have converted, among others, a descendant of Philip, Prince Ernest of Hesse, to the Catholic Church. [It has, in fact, been stated by (now recovered) historians, that the doctrine of Luther touching marriage, and the practice of the Landgrave, were the obstacles which prevented the Emperor Ferdinand I. from declaring for the Reformation ; and some distinguished converts have openly ascribed their desertion of Protestantism to the same cause.] A corresponding opinion of Dr Henke, late Primarius Professor of Theology in Helmstadt, would have figured, had he known it, with admirable effect, in Mr Pearson's catalogue of modern Teutonic heresies. "Monogamy," (says that celebrated divine,) "and the prohibition of extra-matrimonial connexions, are to be viewed as the remnants of monachism and of an uninquiring faith." However detestable this doctrine, the bold avowal of the rationalist is honourable, when contrasted with the skulking compromise of all professed principle, by men calling themselves—"The Evangelicals." Renouncing the Pope, they arrogate the power of the Keys to an extent never pretended to by any successor of St Peter ; and proclaiming themselves to the world for the Apostles of a purified faith, they can secretly, trembling only at discovery, authorize, in name of the Gospel, a dispensa-

III.) *BIBLICAL CRITICISM*.—(i.) “The books of the *KINGS* are more worthy of credit than the books of the *CHRONICLES*.” [Colloquia, c. lix. § 6.]—(ii.) “The book of *ESTHER*, I toss into the Elbe.”* [Ib.]—[“And when the Doctor was cor-

tion of the moral law. Compared with Luther [?] or Cranmer, how respectable is the character of Knox!

[Before 1843, I had become aware, that this last statement was incorrect; and in a supplemental note to a pamphlet published by me in that year, I made the following retraction:—“I do not found my statement of the general opinion of Luther and Melancthon in favour of polygamy, on their special allowance of a second wife to Philip the Magnanimous, or on any expressions contained in their *Consilium* on that occasion. On the contrary, that *Consilium*, and the circumstances under which it was given, may be, indeed *always have been*, adduced to show, that in the case of the Landgrave they made a sacrifice of eternal principle to temporary expedience. The reverse of this I am able to prove, in a chronological series of testimonies by them to the religious legality of polygamy, as a general institution, consecutively downwards from their earliest commentaries on the Scriptures, [not as Mr Hare perverts it (p. 840), ‘their commentaries on the earliest books of Scripture,’] and other purely abstract treatises. So far, therefore, was there from being any disgraceful compromise of principle in the sanction accorded by them to the bigamy of the Landgrave of Hesse, they only, in that case, carried their speculative doctrine (held, by the way, also by Milton), into practice; although the prudence they had by that time acquired, rendered them, on worldly grounds, averse from their sanction being made publicly known. I am the more anxious to correct this general mistake touching the motives of these illustrious men, because I was myself, on a former occasion, led to join in the injustice.”—(Bo not Schismatics, &c. p. 59, 3d ed.)

Mr Hare, indeed, in reference to this, denies the existence of such a “series of testimonies” (p. 839); but the value of his denial must depend upon his knowledge; and while he admits that he knows little of Melancthon, proof is here given that he knows less than little, for nothing correctly, of Luther. *The series I have*.—Of certain statements touching Luther, made by me in the pamphlet just referred to, Mr Hare has likewise hazarded his contradictions. But, though this cannot here be shown, such contradictions, whether by him or others, are, one and all, equally futile as those which are here disposed of.]

* [Soon after the publication of this article, I became aware, that *Esther* was here a mistake for *Esdras*; and this by the verse quoted. The error stands in all Aurifaber’s editions of the *Table Talk*; his text is taken by Walch, and from Walch I translated. It is corrected, however, in the recensions by Stangwald and Selneccer, and, of course, in the new edition of the *Colloquia* by Bindseil. It was therefore without surprise, that I found Mr Hare for *once* to be not wrong in finding me not right (p. 818.) As to my error; I may say in excuse, if excuse be needed, that at the time of writing the article, not only was I compelled to make the extracts without

recting the second book of the Maccabees, he said :—] I am so an enemy to the book of *Esther*, that I would it did not exist; for it Judaizes too much, and hath in it a great deal of heathenish naughtiness. [Then said Magister Foerster," (the great Hebrew Professor) :—"The Jews rate the book of Esther at more than any of the prophets; the prophets Daniel and Isaiah they absolutely condemn. Wherenpon Dr Martinus :—It is horrible that they, the Jews, should despise the noblest predictions of these two holy prophets; the one of whom teaches and preaches Christ in all richness and purity, whilst the other pourtrays and describes, in the most certain manner, monarchies and empires along with the kingdom of Christ." *—(iii.) "Job spake not, therefore, as

any leisure for deliberation; but I recollected, though the book was not at hand, that Luther, in his work on the Bondage of the Will, had declared that *Esther* ought to be extruded from the canon,—a judgment familiar to every tyro even in biblical criticism. His concluding words are :—"dignior omnibus, me iudice, qui extra Canonem haberetur." (Jena Latin, iii. 182.) *Esther*, I thus knew, was repudiated by Luther, and among his forerunners of dismissal the preceding recommended itself as at once the most characteristic and the shortest. Mr Hare speaks of Luther as "a dear friend." But it appears from his general unacquaintance with even this, the Reformer's favourite and most celebrated book, certainly, from its two recent translations into English by two Anglican clergymen, the book of his best known in this country,—that Luther, far from "a dear friend," is rather an utter stranger to the Archdeacon. For Mr Hare knows nothing (even at second hand,) of Luther's famous repudiation of *Esther*, in his most famous and familiar work.—As for myself, I relied also on the following testimony; and which, had we nothing else, would be alone decisive in regard to Luther's rejection of *Esther*.]

* [On this Mr Hare, *inter alia*, remarks :—"The combination of the book with that of the Maccabees,—which the Reviewer ought not to have omitted,—as well as Forster's remark, leaves no doubt that Luther spoke of the book of *ESDRAS*. These blunders," &c. (p. 819).—I have now given the whole relative context; and had Mr Hare possessed the sorriest smattering of the Rabbinic lore which he affects,—had he, in fact, not been unread even in the most notorious modern works on biblical criticism, he would certainly have had "no doubt," but no doubt that Luther spoke, and could speak only, of the book of *Esther*. I shall simply quote the one highest Jewish authority, in regard to the comparative estimation among the Jews, of *Esther* and the Prophets: while, as for Christian testimonies, I may refer to almost every competent inquiry into the canonicity of the books of the Old Testament. Let us listen then, to the "Rabbi of Rabbis," Ransbam, Moses Ben Maimon, Moses Maimonides,—to him whom the learned Hebrews delight to honour with every title of Oriental admiration,—and who, by the confession of the two greatest among Christian scholars,

"Solus nugarum Judæos desit inter."

it stands written in his book, but hath had such cogitations. . . . It is a sheer *argumentum fabulæ*. . . . It is probable that Solomon made and wrote this book." [Ib.]—(iv.) "So also have the PROVERBS OF SOLOMON been collected by others, [caught up from the King's mouth, when he spake them at table or elsewhere: and those are well marked, whercin the royal majesty and wisdom shine conspicuous." * (Ib.)]—(v.) "This book (ECCLESIA-

" All the *Prophetic* books, and all the [*Hagiographic*] *Writings* are of the things to be *abolished* in the days of the Messiah, *saving alone* the roll of ESTHER. For, lo, *this endureth*, like the Law of Pentateuch and the Oral Law [Talmud]; and *these, they shall not cease, even unto eternity*. For howbeit the memory of all other persecutions shall die out; . . . yet, as it is written, 'the days of *Purim* shall not fail from among the Jews, nor the memorial of them perish from their seed.' [Esther, ix. 28.]" (Yad Chasaka, B. iii. tr. x., Hilchot Meghilla, c. 2, § 18; and passages to the same effect are to be found in his Ikkarim. Compare also the Midrash Meghilla; and the margin of the Jerusalem Talmud, where, among the commentators, the Rabbi Jochanan and the Rabbi Resch-Lakisch, from the texts, of Deut. v. 22; and Esth. ix. 28, deduce the same result, by a marvellous, and truly Jewish reasoning.)—On the other hand, who has ever heard, as Mr Hare assumes, and would have it understood, that *Esdras* was, at any time not to say always, held, even as a prophet, in any special estimation among the Israelites?—Besides these foregoing, there are sundry other elementary errors, even on Anglican doctrine, in Mr Hare's observations upon this book; these, however, as they do not directly concern the question, may pass. But, travelled in the Ghemara, and stumbling on his own Church's threshold!]

* [This is illustrated by what Luther says in the Standing Preface on the Preacher of Solomon, which dates from 1524. "This book, also, of the *Proverbs of Solomon*, has been pieced together by others; and among his, have been inserted the doctrine and sayings of sundry wise men.—Item, the *Song of Solomon* appears, in like manner, as a pieced book, taken by others out of Solomon's mouth."—I shall not imitate Mr Hare's language (p. 820); but simply remark, that in his pretended translation of the addition in the text, besides interpolating, he wholly misrepresents what Luther says, in as much as his version would *limit the collection to the sayings of Solomon alone*.—It is in unison with such a proceeding, to assert, that I cited the sentence originally extracted, "as an example of licentious criticism on the Scriptures, of such criticism as proves Luther to have furnished warrants and precedents for all that is most 'obnoxious' in modern rationalism." For, though the correlative passages, which Mr Hare has now compelled me to adduce, may be held to warrant the worst license of modern criticism; I manifestly meant only, in the several testimonies originally cited, to show that Luther affords a precedent for some one or other of the various degrees of rationalist audacity, and not, as Mr Hare chooses to misrepresent it, that *each* was alleged as an example and parallel of the *very highest*.—But, as to Luther's doctrine in these

ASTES) ought to have been more full; there is too much of broken matter in it; it has neither boots nor spurs, but rides only in socks, as I myself when in the cloister. . . . Solomon hath not therefore written this book, which hath been made in the days of the Maccabees by the Son of Sirach. It is like a Talmud compiled from many books, perhaps in Egypt, from the Library of King Ptolemy Euergetes." * [Ib.]—(vi.) "ISAIAH hath borrowed his whole art and knowledge from David out of the Psalter." † [Ib. c. ix. § 10.]—(vii.) "The history of JONAH is so monstrous, that it is absolutely incredible." ‡ [Ib.]—(viii.) "That

passages :—Does Mr Hare venture to maintain,—that the opinion of biblical books being a compilation by unknown collectors, and, in part, from *unknown and uninspired authorities*, is an orthodox opinion,—an opinion consistent with any admissible doctrine of revelation? Will he even hesitate to confess,—that this doctrine of Luther would, in a modern critic, be justly stigmatised as licentiously rationalistic?—And again, to use Mr Hare's own words, would an "*honest writer*" have first "*shamefully garbled*" the quotation which he pretends to give, both by *interpolation* and by *omission*, and then accuse another of the very practices of which *he himself alone* is guilty? See pp. 819, 820.]

* [I now doubt not that Luther used the word *Ecclesiasticus*, which the reporter heard as *Ecclesiastes*, appending afterwards the translation of *The Preacher*; for the quotation is from the Table Talk. I think no one will dispute this who compares, *inter alia*, Luther's "Preface to the Book of Jesus Sirach," to be found, as all the others, in Waleh's edition of his works. (xiv. 91.) It is lucky, that Mr Hare did not discover this; for it would have afforded him a text on which to hang some pages of his usual vituperation. On this passage he indeed makes no remark. The mistake has also, I see, escaped Dr Bindseil, in his conclusion of Foerstemann's late elaborate, though by no means adequate, edition of the Colloquia.]

† [Luther also (Ib. § 23) says :—"Moses and David are the two highest prophets. What *Isaiah* hath, that he takes out of David, and the *other prophets* do in like manner." This I presume to think inconsistent with a true doctrine of revelation. Inspiration borrowing!—Inspiration imitating! I did not however suppose that, reprehensible as might be the expression, Luther denied the prophetic gift of Isaiah.—Mr Hare mistakes the passage translated in the text; and, otherwise, says nothing to the point. (P. 819.)]

‡ [I quoted these words of Luther to show in how irreverent a manner he thought himself privileged to speak of the Holy Scriptures. Mr Hare is of a different opinion; which he is entitled to hold, if *de gustibus non est disputandum*. (Pp. 820, 821.) But in what he gives as translations, he has certainly no right to do, what, however, here and elsewhere, he unscrupulously does;—to make Luther speak as he would wish him to have spoken,—then to found on what he himself fallaciously substitutes, as on Luther's veritable expressions,—nay even to accuse others, of his own peculiar, of his own exclusive practices. Yet all this he ventures habitually to do: and his com-

the EPISTLE TO THE HEBREWS is not by Saint Paul; nor indeed by any apostle, is shown by chap. ii. 3. . . It is by an excellently

ments on this prophet afford not incompetent illustrations. For example: After animadverting, without even the semblance of a ground, on my "*monstrous and almost incredible misrepresentation*;" and before gratuitously imputing to me a "*shamefully garbled quotation*;" he touches on what Luther says in reference to the history of Jonah. Of this history the Reformer dares to assert:—"*Es gehet auch eben naerrisch zu*," ("It passes, moreover, even into the foolish;") a sentence which Mr Hare concealing, coolly renders by—"And how oddly it turns out!" How oddly, indeed! Fidas interprete!

But of the Archdeacon's general fidelity in translation, I may here, once for all, adduce another sample; where he does not (as neither did he in the preceding instance,) enable his reader to detect a misinterpretation, by quoting, as he punctiliously does on less important occasions, the original. Melancthon had fallen ill at Weimar from contrition and fear for the part he had been led to take in the Landgrave's polygamy; his life was even in danger. Luther came; and Melancthon is one of the *three* persons whom the Reformer afterwards boasts of having *raised miraculously from the dead*. At present we have only to do with Mr Hare's translation of the account given by Luther, of the operation. "Allda (saget Lutherus) musste mir unser Herr Gott herhalten. Denn ich warf ihm den Sack fuer die Thure, und rieb ihm die Ohren mit allen promissionibus exaudiendarum precum, die ich in der heillge Schrift zu erzaehlen wusste, dass er mich musste erhoeren, wo ich anders seinen Verheissungen trauen sollte." (May I indeed venture to translate this?) "'Then and there,' said Luther, 'I made our Lord God to smart for it. For I threw him down the sack before the door, and rubbed his ears with all his promises of hearing prayer which I knew how to recapitulate from Holy Writ, so that he could not but hearken to me, should I ever again place any reliance on his promises.'" This the Archdeacon thus professedly translates:—"Then, said Luther, *Our Lord God could not but hear me*; for I threw *my* sack befor *His* door, and *wearied* His ears with all His promises of hearing prayers, which I could repeat out of Holy Writ; so that He could not but hear me if I were ever to trust in His promises." (P. 854.) Now Mr Hare's translation is not a version, as it pretends. It is a dissimulation, a concealment of Luther's appalling expressions; and is thus in reality a condemnation. But it is not simply unfaithful; for it is out of harmony with the Reformer's whole theory in regard to the efficacy of prayer in general, and particularly in regard to the mighty—the almighty power of his own. For Luther believed, that *nothing could be refused to his earnest supplication*; and accordingly he declares, that it required only that *he should sincerely ask for the destruction of the world, to precipitate the advent of the last day*. This doctrine was carried to every its most absurd extreme by the other reformers; and even the trigamist prelate of Cassel, the wine-bibbing Melander, exhorted his clergy to pray for a plentiful hop-harvest, that, (as his son or grandson records,) though himself abominating beer, there might thus be a less demand for wine, and he, accordingly, allowed to indulge more cheaply in the juice of the grape.]

learned man, a disciple of the Apostles. . . It should be no stumbling-block, if there be found in it a mixture of wood, straw, hay." [Standing Preface in Luther's Version.](ix.) "The EPISTLE OF JAMES, I account the writing of no apostle." [Standing Preface.] "*St James's Epistle* is truly an Epistle of straw [in contrast to them," ("the right and noblest books of the New Testament") "for it hath in it no evangelical character."* (Fragmentary Preface to the New Testament, 1524.)]—(x.) "The EPISTLE OF JUDE is an abstract or copy of St Peter's second; . . and allegeth sayings and stories which have no place in Scripture." [Standing Preface, &c.](xi.) In the REVELATION OF JOHN much is wanting to let me deem it either prophetic or apostolical. . . I can discover no trace that it is established by the Holy Spirit." [Preface of 1522.]†—Παῦρος μὲν, ἀλλὰ μάλα λυγρὸς.

* [In various of his works, and from an early to the latest period, Luther denied the canonicity of *St James's Epistle*. To adduce only a few of his testimonies:—In 1519, in the seventh Thesis against Eck, he declares it "wholly inferior to the apostolic majesty;" and in the following year, in the Chapter on Sacraments, of his *Babylonish Captivity*, "unworthy of an apostolic spirit." In 1522, in a conclusion, afterwards omitted, of the Standing Preface, he excludes it "from the list of canonical books;" an exclusion, however, contained in the Standing Preface itself, in addition to the testimony quoted from it in the text. We find in the Church Postills, which were frequently republished, Luther asserting:—"This Epistle was written by no Apostle; no where indeed is it fully conformable to the true apostolic character and manner, and to pure doctrine." (Waleh. xii. 769.)—Finally, it is rejected, as in doctrine contradictory of St Paul, in the Table-Talk. (C. lxix. § 4.)—Of all this Mr Hare seems ignorant; nor does he even translate the passage in the text without an interpolation of his own. His observations are otherwise of no import. (See p. 815.)]

† [I have not deemed it necessary to quote any thing in confirmation or supplement of the extracts from Luther, relative to the biblical books, except when Mr Hare has hazarded his strictures. On *more than half* of my examples of Luther's temerarious criticisms, he has been silent. He has ventured no remark in regard to the books of—(i.) *Kings* and *Chronicles*, (iii.) *Job*, (v.) *Ecclesiastes*, (viii.) *Epistle to the Hebrews*, (x.) *Epistle of Jude*, (xi.) *Apocalypse*. The half of these likewise, be it remarked, are attacked by Luther, regularly and in writings formally expounding his last and most matured opinions. So that even if Mr Hare had been as successful, as he is unfortunate, in his counter-criticism,—were, in fact, all the extracts expunged, in regard to which he has thought it possible to make a single objection; nevertheless my conclusion would still stand untouched,—that Luther, though personally no rationalist, affords a warrant to the most audacious of rationalistic assaults. For, as observed, he could not vindicate this license of judgment, as a right peculiar to himself—as a right not com-

As to this last, how could Mr Pearson make any opinion touching the *Apocalypse* matter of crimination against Semler and

mon to all. Accordingly, the ultra-rationalist Wegscheider dedicates his *Institutiones Theologiæ* to the memory of Luther; and in what terms? "*Piis Manibus Martini Lutheri; . . . qui . . . Rationi humanæ suum jus vindicavit, quamque viam, in sacris ad Christi præceptas instaurandis, ipse præleverat, ea ut pergerent posteros admonuit.*"

(1853). But now to finish with Mr Hare.—His defence of Luther, against what he regards as offensive statements by others and myself, is contained, as said, in a long excursus (Note W) appended to his book entitled,—“The Mission of the Comforter.” This work (of which, and its treacherous attack, I only accidentally became aware,) was republished, some two years ago, with the omission, however, of the polemical note; but since then, that note (a considerable volume of itself,) has ever and anon, and down even to the present time, been advertised, as forthwith about to appear in the shape of an independent treatise. But, as we have seen, Mr Hare is not the champion for Luther; and if he be effectually counselled, the farrago will not again see the light. For it is simply a verbose conglomeration of—what I shall refrain from characterising; the author making more mistakes or misrepresentations than the note, however confessedly “prolix and garrulous,” exhibits paragraphs. But “The Archdeacon of Lewes” neither learns nor listens. He is not content to enjoy his ecclesiastical good fortune in humility and silent thankfulness. He *will* stand forward; he *will* challenge admiration; he *will* display his learning; he *will* play the polemic: and thus exposes to scorn not merely himself. For he has the imprudent confidence to do, what he might refrain from doing. He ventures not merely (with all the world) to write books, but to indite,—to deliver,—nay, even to print and publish, “*Charges*,” that is inculcations of opinion, by one clergyman officially supposed competent to advise, on a multitude of clergy officially supposed needing the advice. That *official* and *real* do by no means, in our British churches, infer each other, it is surely unwise, as things now are, obtrusively to demonstrate. Of these Charges, I have chanced to meet with and to look into (I suppose) the last. This again chanced to open at an exulting attack upon a brother Anglican divine; and him I found taunted for the most disgraceful ignorance touching the great reformer Ulrich Zwingli, and the epoch of his memorable death: an attack, however, which proved only another proclamation of the Archdeacon’s own curious unacquaintance with the history of the Church and of the Church of England. Mr Hare actually knows nothing of Ulrich Zwingli, the *son*, Professor of Theology in Zurich, and friend also of the Anglican refugees during their memorable sojourn in that city,—for to him the obnoxious reference was made; and in the presumption of this, his own want of the most ordinary information, Charge and Charger bristle up, as usual, in petulance and pugnacity.

This then, and Mr Hare’s other manifested ignorances and misrepresentations, are surely not without significance. They show, in general, that he knows little either of Theology or of the Reformation; and they show, in particular, that he is even imperfectly acquainted with the principles and

Eichhorn? Is the Christian Advocate unaware, that the most learned and intelligent of Protestant—of Calvinist divines have

history of his own peculiar church. But, what must be the state of clerical patronage, when such as Mr Hare can be, by comparison, a not unworthy dignitary of the Anglican Establishment? what, in general, must be the state of our theology, when such as Mr Hare can be looked up to as a respectable authority among British divines?

Since the above was written, No. V. of "The British and Foreign Evangelical Review," (of which anon,) has been brought under my notice; and as it affords a good sample of the so called religious journalism of our times and country, I shall extract from it a passage relative to Mr Hare's Lutheran polemic. It is from an article entitled—"The Writings of Archdeacon Hare," in which he is represented as a leader of "the Theological Speculation in England."—"In his volumes of notes, too, there are several elaborate investigations on questions of controversial theology, which, in point of candour, insight, comprehensiveness of view, thoroughness of research, and force and vividness of expression, may be pointed to as models in that kind. Among these we would instance the well known Note W, in the second volume of the 'Mission of the Comforter,' vindicating Luther from the calumnies and assaults of three hundred years, which we have always regarded as a pleading worthy of being delivered in a great cause before the tribunal of the world. Such a production only finds its right place when it is given, in compliance with a general wish, to the public in a separate and permanent form."—This, I assure the reader, is said seriously, not in jest.]

* [(1853). It is here apparent, that nothing could be further from my purpose, than to hazard any personal opinion in regard to the authority of the Apocalypse, far less to venture a dogmatical attack upon its canonicity. (For myself, in fact, in such a problem, I am inclined to accord but little confidence to the decisions of erudition and reasoning). I assert only, that the authenticity of the Apocalypse is an open question among theologians,—that it may be *orthodoxly doubted*; and that such is the fact, no one, cognisant of the circumstances, can conscientiously deny.—Besides other modern divines, the inspiration of the book was expressly gainsaid by Luther; and surely what Luther peremptorily denied, others may be allowed in caution and diffidence to canvas.—But the Apocalypse stands in a peculiarly unfavourable position among the books of the New Testament. To the present hour, some national Churches do not acknowledge it. It was long rejected in the Greek Church, and long doubtfully admitted in the Latin. Caius, the Roman Presbyter (c. 210,) rejects it as the work of the Heretic Cerinthus; St Dionysius, Patriarch of Alexandria, (c. 250,) himself approving, records that many had refuted and refused it; Eusebius (c. 330) states historically, that, by different authorities, it had been regarded, as authentic, as doubtful, as supposititious; St Jerome (c. 360) testifies, that, in his time, it was disallowed by the greater number of the Greek Churches; Amphilochius (c. 390) notices, that it was then received by some, but rejected by many more; it is not admitted as canonical into the catalogue of the Council of Laodicea (c. 360); nor into that of St Cyril (c. 410);—in short, its

canonicity was not (provincially even) decreed in the Western Church, until the middle of the seventh century, to wit, by the fourth council of Toledo (633).—Such being the case, it is clear,—and the clearness becomes dazzling by Luther's example,—that the canonical authority of the Apocalypse is a problem free as air to theological speculation—at least in Protestantism. Now this, and nothing more than this, I here asserted; illustrating, however, the fact of the freedom, by reference to more modern theologians.

In such circumstances, I should not have thought of corroborating these passing statements by a quotation of the authorities on which they rest; for though these statements were only made from recollection, I was certain that, if not always perhaps accurate to the *full*, in unessentials, they were, at least, always *within* the truth in essentials. But just as these sheets were revising for the press, there was duly transmitted to me "The British and Foreign Evangelical Review" for June, 1853, as containing an article entitled,—“Sir William Hamilton's Attack on the Apocalypse.” In opening the journal, I had little expectation of any new light upon the subject; and no fear at all of my own accuracy being touched. I only ventured to hope,—and surely with an “Evangelical Review” the hope was not excessive,—that the matter might be fairly and charitably argued. In both respects I have been disappointed. As to the *fairness*;—in the prolix paper (eighteen pages on sixteen lines!) my statements are misrepresented in the very title, as an “*attack* on the Apocalypse.” Then, the preliminary quotation of my words is decapitated, to avoid letting the reader know, that the inspiration of the Apocalypse had been denied by Luther. That no allusion is made to the fact of this inspiration having been so long a matter of dubiety in the earlier Church, may be excused, on the supposition, that the fact itself was unknown to the journalist. Again, as to the *charity*;—nothing, in truth, can exceed the hardness of the language, but the softness of the reasoning. The facts, to be sure, when approached, evaporate into fancies; but woe to the intruder who has dared to treat the fancies as not facts.—But be the criticism what it may, I had, assuredly, no disinclination to the easy task of still farther proving, that nothing has been here advanced without sufficient warrant.

But before proceeding, in the four following Notes, to dispose of the journalist's objections in detail, I may observe in general, that his brief comment on Semler and Eichhorn, shows him, at once, to be profoundly ignorant of German theology; while his imagination,—that a divine “quoting and reasoning from a scriptural book,” without expressing a doubt of its authenticity, affords “the best of all reasons” to infer his conviction of its inspiration,—this shows that he is but little versed in theological speculation, or read in theological writings, of any kind. Such a criterion would, indeed, at once, supersede all doubt of the canonicity of any book by any divine. Try it upon the greatest—upon Luther. Now we know, that the Megalander denied more or less explicitly, the authenticity of the following among other books; and yet the following among other books are thus frequently cited, without proscription, by him:—Chronicles, 47 times; Esther, 3, and Part of Esther, 6, times; Jonah, 23 times; Epistle to the Hebrews, 110 times; Epistle of James, 35 times; Epistle of Jude, 23 times; Apocalypse, 103 times.—The journalist's single commonplace of argument is thus shewn at once to be radically naught; and the principle being subverted, it would be idle to evince

almost all doubted or denied the canonicity of the Revelation? [Besides Luther,] the following rise the first to our recollection. Erasmus, who may, in part, be claimed by the Reformation, doubted its authenticity.* Calvin and Beza denounced the book as unintelligible; and prohibited the Pastors of Geneva from all attempt at interpretation; for which they were applauded by Joseph Scaliger, Isaac Casaubon, and our Scottish countryman, Alexander Morus,—to say nothing of Bodinus,† &c. Joseph

the futility of its applications in detail. And while the *fact* of the assumption being vicious is certain; *why* it is so, is too manifest for mention.

Finally, before leaving generals, I have simply to state what I have presumed to be, and acted on as, true. 1°, *PROTESTANTS prohibiting the ecclesiastical employment of a book, virtually express their suspicion, at the least, that such book is not the Word of God.* 2°, *The same is likewise implicitly confessed, in the acknowledgment, that what professes to be of revelation, may call itself "The Revelation," actually reveals nothing.*—The application of these principles, it is surely not requisite in the following notes, specially to signalise.]

• [(1853). ERASMUS'S doubt concerning the canonicity of the Apocalypse will be found in his last annotation upon that book. This doubt is one of the grounds of their relative condemnation by the Theological Faculty of the University of Paris; and his defence is, that Eusebius, St Jerome, and many other high authorities had, like him, recognised the compatibility of orthodoxy and this doubt.]

† [(1853). 1). Of these witnesses I shall take CASAUBON first: both because he speaks most explicitly to all the points; and because his evidence is that most german and authoritative in the question. For not only did Casaubon, looking to him in general, form with Scaliger and Salmasius the Triumvirate of modern erudition; but looking to him in special, no higher testimony in the present case than his can even be conceived. He was a native Genevese; born in that city five years before the death of Calvin, and forty-four before the death of Beza; studied in the schools and Academy of Geneva; in that Academy succeeded Francis Portus as Professor of Greek; and, he himself informs us, "lived for fourteen years at Geneva as Professor, first of Greek, then of Greek and Latin, and sometimes also of Hebrew literature." He married in 1586, in Geneva, a Genevese wife, Florence, daughter of the famous Henry Stephens (Etienne, Stephanus); was always returning to Geneva, when not there permanently resident; there, indeed, generally left his children; and there was his sister married and remarried. He was the correspondent and intimate friend of Beza, down to the reformer's death; eulogises "the great Beza" in five Greek poems, though his metrical productions are in all but few; and Beza, as we expressly learn from his diaries, was Casaubon's principal object when visiting Geneva in 1603.—Finally he was, in particular, an illustrious theologian; and after the death of Beza, the most learned ecclesiastical scholar among the Calvinists. He was thus selected, as the most competent champion of the party, to oppose Baronius.—In these circumstances, the following extract from his *Adversaria*, written with his own hand, and prepared for publication shortly before his death, is superfluously cogent.

"Many expositors of the APOCALYPSE, [to use a Greek proverbial,] 'overleap the ditch'; these I account as only on a par with quacks, trumpeting their peculiar nostrums for divine specifics. CALVIN and BEZA have acted better; in as much as they have *neither themselves attempted an interpretation of the Apocalypse, nor permitted that any one in Geneva should profess an explanation* (interpretationem profiteretur, i. e. should preach,) *touching aught within the circuit of that book.* Pious persons, especially in the controversy concerning Anti-Christ, have however observed many things regarding the events of those prophecies which may seem true (quæ vera videantur.)"

This testimony, which was written in or after 1606, will be found (p. 20) in the following book:—"CASAUBONIANA: sive *Isaci Casauboni* varia de scriptoribus librisque Judicis,—Observationes Sacræ in utriusque Federis loca, Philologicæ item et Ecclesiasticæ,—ut et Animadversiones in *Annales Baronii Ecclesiasticos* ineditæ; ex variis Casauboni MSS. in Bibliotheca Bodleiana reconditis, nunc primum editæ à *Joanne Christophoro Wolfio*, Prof. Publ. Philosoph. Extraordinario in Academ. Witteberg. Accedunt duæ *Casauboni* Epistolæ ineditæ, et Præfatio ad librum de Libertate Ecclesiastica: cum notis *Editoris* in Casauboniana, &c. Hamburgi; M.DCC.X."—The editor, John Christopher Wolf, at page 47 of the Preface and 35 of the text; gives a minute account of the particular volume from which this passage is extracted.

(I may observe, by the way, that Wolf was both a distinguished theologian and one of the most useful philologists of his generation. The pupil and friend of the great John Albert Fabricius, he had the free use of his extensive library. Among others, a work of Wolf, in 1706, may be remarked:—"Compendium Historiæ Philosophicæ Antiquæ, sive PHILOSOPHUMENA, quæ sub *Origenis* nomine circumferuntur, &c. a *M. Jo. Christophoro Wolfio*. Præmissa est præfatio, qua ostenditur, libri Scriptorem incertum esse, adeoque nec *Huetii*, nec *Galeii*, nec *Gronovii*, de eo sententias aut conjecturas firmis rerum argumentis niti."—Had M. Miller been acquainted with Wolf's Preface, he would never have attributed to Origen the book on Heresies published by the University of Oxford, of which the *Philosophumena* are part. Wolf, in a long and learned introduction, proves, that this fragment could not have been by Origen, but by some author who was a *Bishop*; and though he does not surmise that Hippolytus was the writer, he still by exclusion brings the right decision nearer to a point. The Chevalier Bunsen also appears never to have seen the book; for he confounds, in his references, the philologist *John Christopher*, with the philosopher *Christian*, Wolf.—But to return from our digression.)

The French Hugonot Church seems to have stopt short in this matter of the Church of Geneva, though the example of the latter, and the personal influence of its leaders, more especially of Beza, exerted a powerful effect upon the former.—*Durell*, who affords us the following testimony, was born in Jersey, 1625. Originally a non-conformist, he had studied in Saumur under the great Amyraldus; but was afterwards brought into the communion of the Anglican Church, and became chaplain to Charles II. His intimate acquaintance with the matter of which he speaks makes his testimony decisive; it is taken from his *Ecclesiæ Anglicanæ Vindicie*, 1669.—"But we have already observed that in the Reformed Churches of

France, the entire Catechism is annually expounded from the pulpit,—an infinity of biblical texts being passed over; *nor is it allowed to the French ministers to explain in their sermons the Book of Revelation*, which is canonical, beyond the three first chapters, unless license has been previously obtained from the Synods." (C. xiv.)—A slight research would, I make no doubt, multiply indefinitely the testimonies on this point; but it is not required.

Before proceeding farther, it may be proper to call attention to the fact, that the learned and charitable journalist speaks of my "*absurd statement* about the prohibition issued by Calvin and Beza to the Genevese pastors;" as what he "supposes will be fairly given up as a flourish of trumpets," calling it likewise "*a scandalous statement*"—"a calumnious fiction:" while, "recklessness," "shameful blundering," "bungling mis-statements," "carelessness about accuracy," &c., are among the christian verities of our "Evangelical Reviewer's" very seemly "*rebuks*."—Such now is sectarian criticism!

2.) But I have not yet done; and as the second principal authority, call up JOSEPH SCALIGER, "The Dictator of the Commonwealth of Letters,"—the first of "The Triumvirate of Learning." Every scholar knows, that the Table-Talk of this greatest of great philologists is composed of two collections; which, when ultimately combined, were denominated Scaligerana *Prima* and Scaligerana *Secunda*, to mark their chronological relation; the former, though published last, having been spoken many years before the other. Both collections have been redneed to alphabetical order; and the convenience of this arrangement has been purchased by some disadvantages.—In the following extracts, I shall translate the Latin—simply quoting the French; and the edition I use is the best, that by Des Maizeaux, Amsterdam, 1740. I find, likewise, that I must conjoin all the apocalyptic quotations; for it is impossible to detach what might be more pertinent to the ensuing note.

PRIMA SCALIGERANA.—*Apocalypsis*. "I may boast of being ignorant of none of those things prophetically written in the Apocalypse, a truly canonical book, except that chapter in which *Woe!* is seven times repeated: for I know not whether the time there referred to be past or future. &c."—On this there is the following note by the learned Tanaquil Faber:—"When Scaliger says, that the Apocalypse of John is 'a truly canonical book,' he was not the Scaliger whom he afterwards became; for subsequently it appears that he thought widely different." (P. 15.)

SECUNDA SCALIGERANA.—*Apocalypsis*. "The Syrian Church does not acknowledge the Apocalypse; although Scaliger has a Syrian version of it, which the patriarch sent to him, the Maronites having procured the translation.—*I hardly believe that the Apostle John is the author of the Apocalypse*. L'Apocalypse a été écrite en Hebreu. . . . Whatsoever, before the last forty years, has been written upon the Apocalypse, tout cela ne vaut rien. In the Apocalypse there are only two chapters [xiii. and xvii.] which can be understood; these are very clear, nor can their exposition be denied.—*Calvin is wise (sapit quod) for not having written upon the Apocalypse*." (P. 200.)

Bullingerus. "Bullingerus est le moins mal sur l'Apocalypse. Napeir ne vaut rien, il n'a rien dit que vaille. Il n'y a que le xiii. et xvii. chapitres que soient bien clairs, et que nous entendions." (P. 246.)

Calvin. "*Calvin a très bien fait de ne rien écrire sur l'Apocalypse*. . . .

How well Calvin hits the meaning of the prophets! None better; the genius and the judgment of Calvin were consummate. *He is wise (sapit quod) for not having written upon the Apocalypse.*" (P. 251.)

Our journalist knows as little of Scaliger as of Casanbon. He never saw the *Prima Scaligerana*; understands not even the meaning of the term; and all his information regarding the history of this famous collection, on which so much has been written, he tells us, "is taken from an old French book."

3.) I now proceed to the testimony of ALEXANDER MORUS; and in regard to him and Scaliger, we must always bear in mind that they speak under the knowledge of the Apocalyptic interdictions at Geneva, &c. In his "Calvinus," (an Oration spoken at Geneva in 1648,) Morus says:—"Whom will you show me from the whole band of Fathers, who" . . . so well as Calvin . . . "has elucidated all the books of Scripture, from the first even to the last? To the last I say, nor do I except the Apocalypse, which he did not touch, because, by not touching, he gave upon it the finest commentary." (P. 13.)—And again, praising Calvin's moderation:—"Hence it came to pass, that he always refrained himself from a revelation of the Revelation (ah apocalypsi Apocalypseos), an occupation with which those anxious to display their powers of ingenuity are above measure delighted." (P. 49.)—The reader may interpret these encomia for himself.

4.) In coming to BODINUS we proceed chronologically backwards; for his *Methodus Historica*, in which his testimony appears, was published in 1566, that is only two years after the death of Calvin. In chapter vii., entitled—"Refutation of those who establish the four Monarchies," he says:—"Subsequently, I discovered, that the words of Daniel, as obscure and ambiguous, could be wrested into various senses; and in the interpretation of the prophecies have preferred employing that judicial [and judicious] formula, *Non liquet* (*T is not clear*), to any implicit assent, in deference to the not understood opinion of others. And greatly do I approve of Calvin's not less polished than prudent answer; who, being interrogated—what he thought of the *Apocalypse*, candidly replied:—*That he was wholly ignorant of so obscure a writer's meaning; of whom [indeed] it is still a problem among the learned, —Who and what he was.*"—It is probable, I think, that Bodin was himself the questioner.

"And who was this Bodinus?"—asks the journalist. I shall attempt to answer.—From the time when one Aristotle wrote his eight books of *Politics*, until the time when one Montesquieu wrote his thirty-one books on *The Spirit of Laws*, the six books of *The Republic* by "this Bodinus" is the ablest and most remarkable treatise extant on the philosophy of Government and Legislation; and even until the present day these three authors stand out as the great political triumvirate. "*The Republic of Bodin*" (thus the *President De Lavie* opens the Preface to his *Digest* of that work.)—"the Republic of Bodin obtained in its time a success corresponding to that enjoyed by the *Spirit of Laws* in our own day. No one is ignorant with what applause this recent work has been welcomed,—especially in England. And Bodin, having passed into that same kingdom, in the suite of the Duke of Alençon, to whom he was then attached, had the satisfaction of hearing his Republic, in a Latin version, [before he had himself translated it,] dictated and lectured on in London and in Cambridge. These two authors

have equally obtained the approbation of a people, the best capable of appreciating personal merit, and pre-eminently distinguished by their love of letters, and by the importance attached by them to freedom of discussion on matters interesting to all. We may say, indeed, that the one author and the other treats the same subject in a different point of view." (*Abrégé de Bodin*, I. p. i., 1st ed. 1753.)—And avoiding older authorities, to adduce the late Prime Minister of Prussia, a distinguished theologian, philosopher, historian, speculative politician and practical statesman,—to adduce *Frederic Ancillon*, in his *Tableau des Révolutions du système politique de l'Europe*:—"In the last treaty concluded with the Protestants, it had been resolved to convoke the States-general. They were assembled at Blois. Bodin, who in this age of political disorder had reflected on the constitutive principles of government, celebrated even at the present day by his writings, and who deserves above all to be celebrated for his incorruptible patriotism, made the voice of reason to be heard amid the clamours of violence and of delirium. The states of Blois, &c. . . . Bodin combated this plan with equal wisdom and energy," &c. (ch. xxii.)

The journalist, knowing less than nothing either of Bodin, or of logical presumption, in reference to his testimony regarding Calvin, declares:—"We have no hesitation in saying, that there is *not one word of truth in this story*;" and he afterwards pronounces it "*a lie*" and "*a Romish forgery*."—I can well believe,—in fact I do not doubt, that, without imputing mala fides, "*We [shall] have no hesitation*," if permitted, in always accepting or refusing any statement, according as it does or does not harmonise with "*our*" pre-adopted crotchet. Men in general are indeed wise only according to their wishes; "*quod volunt sapiunt*." An assertion, however "*unhesitating*," (even were the assertion not by an anonymous writer in an irresponsible journal) therefore goes for nothing. The one and only question always recurs,—Is the fact asserted, *PROVED true or false?*—Now here: In the *first* place, there is not the slightest ground, why the statement in question should now be asserted false, and not, as ever hitherto, be fully accredited as true; nay, in the *second*, there is even positive and special proof compelling us to admit its authenticity—For 1^o, Bodin among his contemporaries held always a reputation of consummate probity. In fact, of the moral purity of no peccant individual have we higher testimony. Besides others: the very Monarch on the throne attested this; and Bodin's virtuous contemporary Thuanus, the greatest, perhaps, of all modern historians, lauds his integrity and uprightness. 2^o, What Bodin says of Calvin was published in a popular and most celebrated book,—soon after Calvin's death, and forty years before the death of Beza. But neither Beza nor any other friend of Calvin ever even expressed a doubt (*and we know why they could not*,) about its entire accuracy.—3^o, What is recorded by Bodin of Calvin is professedly told to Calvin's honour. Bodin, in fact, uniformly praises Calvin: and in the very chapter of his *Methodus* immediately preceding, he applauds, in a memorable passage, the Ecclesiastical Censorship established by the Reformer in Geneva;—an approval, indeed, alone, (for alone all-sufficient,) referred to by Morus in his "*Calvinus*." Bodin, in truth, exposed himself to the obloquy of the Jesuits, rather for quoting and quoting with approbation the books of the heretics, than for being a heretic—a protestant himself.—And yet his testimony touching

Scaliger, of the learned the most learned, (rejecting also the Epistle of St James,) did not believe the Apocalypse to be the writing of St John, and allowed only two chapters to be comprehensible;* while Dr South, a great Anglican authority, scrupled not to pronounce it "a book," (we quote from memory,) "that either found a man mad, or left him so."†

But in the *fourth* place, if there were any *connexion* between the antecedent of this argument and its consequent, we ought unquestionably to find, that in this country, religious tests in question do effectually accomplish the intent for which they were imposed; that the dangerous neology so deprecated in the German divines, should with us be found, if found at all, exclusively among those who had not formally surrendered their Protestant privilege of free and unprejudiced inquiry. But not only is this not the case, the very contrary is notoriously true; the attempt at fettering opinion, rousing apparently in the captive a perilous spirit of revolt. In fact, the nearest approximation to the learned freedom of the German divines, and the most enthusiastic eneo-

Calvin is, in an "Evangelical," therefore to be supposed a truthful and charitable, "Review," to be not only without any, but against all, evidence, branded as a "Romish forgery!"

But in reality, it is, perhaps, ridiculous to have said a word on Bodin, after the quotations previously made, especially from Casaubon.—Yet before concluding, I would notice, that Bodinus drew upon himself much calumny and malediction, from both religious parties, by soaring so far above his contemporaries; maintaining, as he ventured overtly to do, a *then* obnoxious heresy on all hands,—*The Liberty of Conscience.*]

* [(1853). In regard to SCALIGER's opinion touching the *Apocalypse*, I must refer to the citations from him in the previous note: and with reference to other biblical books, I find from the *Secunda Scaligerana*, (titles *Epistola* and *Jacobus*, pp. 306, 384,) that, instead of one, as I had imperfectly remembered, he rejects in all seven canonical Epistles; to wit, that to the Hebrews, that of James, the second of Peter, the three of John, and that of Jude. Scaliger rivals even Luther in the audacity of his criticism.]

† [(1853.) SOUTH's words are, I find, from his Sermon entitled "The Nature and Measure of Conscience:—" "Because the light of natural conscience is in many things defective and dim, and the internal voice of God's Spirit is not always distinguishable, above all, let a man attend to the mind of God uttered in his revealed Word. I say his *revealed* Word: by which I do *not* mean that mysterious, extraordinary, and, of late, so much studied book, called the Revelation, and which, perhaps, *the more it is studied the less it is understood, as generally either finding a man cracked or making him so*; but I mean those other writings of the prophets and apostles, which exhibit to us a plain, sure, perfect, and intelligible rule—a rule that will neither fail nor distract those that make use of it."]

miasts of their writings, have been found among the English clergy, and in that clergy, among the teachers and dignitaries of the English Universities. Were we, indeed, required to look around in this country for the one centre, in which a spirit of theological inquiry, analogous to that of the Protestant Universities of the empire, has been most boldly and most conspicuously manifested; we should find it, assuredly, not in any independent seminary, not in any dissenting academy, but in the venerable school itself, of which the *Christian Advocate* is an ornament,—fenced, as he fondly contends it to be, against the entrance of heresy and schism. Mainly to the latitudinary divines of Cambridge, do the Germans themselves trace the determination which, in its result, occasioned in the Lutheran Church, the memorable—the melancholy revolution in theological opinion. Conyers Middleton, Doctor of Divinity, Professor and Public Librarian of Cambridge, was, a century ago, the express abstract of a German ultra-rationalist of the present day. Tests were unavailing against the open Arianism of Dr Samuel Clarke, against the unobtrusive Socinianism of Sir Isaac Newton. Professor Porson ejected, after Newton, the text of the three Heavenly Witnesses, as a human interpolation; and his decision has been all but universally admitted,—at least in Cambridge. Was this attempt to purge the Scripture of a spurious verse, a commendable act of Protestant criticism? Still more commendable will be every honest attempt to purge it of a spurious chapter or book; and the German critics must thus be honourably absolved. Was it, on the contrary, a culpable act of sceptical curiosity? Then are academic tests of no security against the inroads of a restless exegesis.—On either alternative, the *Advocate's* argument is null.

Again, the German divines are denounced by him for maintaining, “that the Pentateuch was composed out of different fragments which were collected together.” He cannot surely be unaware that Dr Marsh, Bishop of Peterborough, and present Margaret Professor of Divinity in Cambridge, maintains, after Eichhorn, that the first three Gospels “are composed of fragments which were collected together.” In both cases the difficulty of reconciling such an hypothesis with an orthodox theory of inspiration is identical; but how different in religious importance are the two series of books!—The dilemma is manifest; and on either horn the *Advocate* is equally impaled.

It is known to all who know any thing of modern divinity, that

the theological writings of Eichhorn, especially his Introductions, concentrate in the highest degree all that is peculiar and most obnoxious in the German school of biblical criticism,—of which, in fact, he was, while living, the genuine representative, and distinguished leader. Now, Lloyd, late Professor of Hebrew in Cambridge, circulated proposals for translating the boldest of Eichhorn's Introductions,—that to the Old Testament; and Bishop Marsh, in his Lectures on Divinity, addressed to the rising clergy of the University, once and again recommends, in the strongest terms, the same work to their study; neither, throughout his whole course, does he think it necessary to utter a single word of warning against the irreligious tendency of this, nor, in so far as we remember, of any other production of the German divines. And, be it considered, that, whilst he peculiarly affects an ultra-Anglican orthodoxy, the Bishop's knowledge of German theology is of a very different character from that of those who have been recently so busy in giving us the measure of their modicum of knowledge and understanding on this important subject. Indeed, with the exception of Mr Thirlwall's excellent Introduction to his translation of Schleiermacher on St Luke, (he might have chosen, we think, a fitter work,) and some parts of Mr Pusey's book, the public had, in every point of view, far better be without all that has recently appeared in this country, in regard to the result of Protestantism in Germany.

But in reference to our argument:—If men in the situations, and with the authority of Lloyd and Marsh, endeavoured thus to promote the study of Eichhorn and his school among the academic youth; either the opinions of the German Divines are not such as the Advocate and others have found it convenient to represent them; or (*quod absit!*) these opinions are already throned in the high places of the English Universities and Church, in spite of the very oaths and subscriptions which it is argued are necessary in order to exclude them.*

* [But of the value of Oath and Subscription in Oxford and Cambridge, I have elsewhere spoken in the previous and ensuing articles.]

VII.—ON THE RIGHT OF DISSENTERS TO ADMISSION INTO THE ENGLISH UNIVERSITIES.

(SUPPLEMENTAL.)

(JANUARY, 1835.)

1. *Speech of Henry, Lord Bishop of Exeter, on occasion of a Petition from certain Members of the Senate of Cambridge, presented to the House of Lords on Monday, April 21, 1834, 8vo. London: 1834.*
2. *Substance of a Speech delivered in the House of Commons on Wednesday, March 26, 1834, by Sir Robert Harry Inglis, Bart., in reference to a Petition from certain Members of the Senate of the University of Cambridge. 8vo. London: 1834.*

THE opponents and supporters of the recent measure for restoring the English Universities to their proper character of unexclusive schools, may pretend indifferently to the honour of having argued their cases in the worst possible manner; and in the cloud of pamphlets, (we have seen nearly thirty), and throughout the protracted discussions in Parliament, which this question has drawn forth, the reasons most confidently urged by the former, are precisely those which, as suicidal, they ought especially to have eschewed; and these same reasons, though cautiously avoided, as unanswerable, by the latter, are the very grounds on which the necessity not only of this, but of far more important measures of academical reform, were to be triumphantly established. So curious in fact was the game at cross purposes, that the official defenders of things as they are in Oxford and Cambridge do, on the principle of their own objection to this partial restoration of the ancient academic order, call out for a sweeping

overthrow of the actual administration of these establishments; and we are confident of proving before the conclusion of the present article, that, unless apostates not only from their reasoning on this question, but from their professions of moral and religious duty, we have a right to press into the service, as partisans of a radical reform in Oxford, (besides the Chancellor of that University, his Grace of Wellington,) the Bishop of Exeter, and Sir Robert Inglis themselves. From the general tenor of their politics, but in particular from their personal relations to this University, (the one its representative, the other long a member of its collegial interest,) these eminent individuals were the natural, and on the late occasion, the strenuous, champions in Parliament of the party now dominant in Oxford;—indeed so satisfied do they appear with their own achievements in the debate, that they, and they only, have deemed their principal speeches, in opposition to the Dissenters' claim, of sufficient consequence to merit publication in a separate form.

In the article on this subject in our last Number, we were compelled to omit or hurry over many important matters.—One portentous error, common to both sides, we indeed (for the second time) exposed,—that *the English Universities are the complement or general incorporation of the Colleges*;—an assumption and admission, from which the partisans of exclusion were able legitimately to infer,—that, *as the constituent parts were private or exclusive foundations, the constituted whole could not be a national or unexclusive establishment*.—There was, however, another not less important error, on which we could only touch; and in regard to the argument attempted to be drawn from *the injustice of interfering with trustees in the faithful exercise of their duty*, so confidently advanced by Dr Philpotts and Sir Robert Inglis, we merely stated, in passing, how gladly we joined issue with them on the principle; and now proceed in supplement of our previous paper, to show, that, when fully and fairly applied, this principle affords a result the very converse of that anticipated either by those who so rashly brought it to bear upon the question, or by those who allowed it to pass without even an attempt at rejoinder.—The following is the argument as pointed by the two Oxford advocates:—

The Bishop of Exeter.—"My Lords, it is, I apprehend, an admitted principle, that where a corporation has received its charter for a specific purpose, the law of England repels, and the legislature of England has hitherto

repelled, every attempt to break in upon that corporation, except on an allegation either that its members *have omitted to perform the duties for which they were incorporated*, or that the purposes for which they were incorporated were originally, or have been declared by subsequent enactments to be illegal, immoral, or superstitious.

"Such, I will venture to say, is the principle of the law of England in respect to corporations; and even if a lawyer could devise any plea in derogation of it, I am quite sure that there is no Englishman of plain understanding who would not proclaim his assent to the reasonableness of that principle. *Now, is it, can it be alleged, that either of the universities, or that any of the colleges within them, have violated the duties of their corporate character, or that they have abused the powers intrusted to them for the performance of those duties, or that the purposes and object of their incorporation are illegal, immoral, superstitious, or otherwise condemnable?* My Lords, *no man has ventured, nor will any man venture to say any of these things.* On what pretence, then, could Parliament dare—(forgive the word, my Lords; when a man feels strongly, he will not scruple to speak strongly, but your Lordships will not, I am sure, think the word needs an apology, for you would not dare to do what is wrong;)—on what pretence, then, I ask, would Parliament dare to set a precedent, which would destroy every thing like the principle of property as connected with corporations, and *would violate all the sacredness that belongs to oaths—ay, my Lords, the sacredness of oaths?* I say this, because it must not be forgotten, that the members of the University of Oxford have sworn that they will obey their statutes, and I doubt not they will keep that oath inviolate. Parliament may have the power to destroy these bodies, but Parliament has not the power—and, if such a thing shall be attempted, Parliament will find that it has not the power—to make these illustrious bodies faithless to the sacred duties which they have sworn to discharge. My Lords, the University of Oxford I know well—many of my happiest years have been passed within it—and from that knowledge of it I speak, when I proclaim my firm conviction, that if both houses of Parliament shall pass the bill which has been brought into the other House, and if his Majesty shall, unhappily, be advised, and shall yield to the advice, to give to it the royal assent—you will not at Oxford find a man—certainly very, very few men, who would not submit to be penniless and homeless, to be outcasts on the world, rather than do that which they now, it seems, are to be required to do—to be parties to the desecration of what they hold to be most sacred, and to the destruction of what they deem to be most valuable in this life, because it is connected with the interests of the life to come."—(Speech, &c. p. 11, &c.)

Sir Robert Inglis.—"The honorable and learned member for Dublin contends, that as the legislature interfered once with the Universities, it has a right to interfere again; but I put it upon the score of common honesty and honour, whether any gentleman in private life would sanction the principle of taking back a gift because you happened to bestow it? Tell me, if you please, that the gift was a trust, and that the trust has been abused, and then I can understand you. *Until it can be proved, however, that the two Universities have betrayed their trust*, you cannot in good faith or common honesty require us to restore the boon which you gave. . . . I do not consider the question to be, whether the University was founded by Catholics

or Dissenters. The present possession has lasted 600 years; and *unless* [which in his speech of the 26th March Sir Robert says, '*is not even alleged*'] *it can be proved that the trust has been abused*, I contend that it ought not to be disturbed. Is the House prepared to take away the rights and privileges of this University *without any proof of delinquency?*'—(March 21, 1834, *Mirror of Parliament*, vol. ii. p. 983).

—"I know how unpopular the practice is in this House of even referring to the oaths which any honourable member has taken; but I will not shrink from that duty, whether the individuals who have taken these oaths be members of the Church of Rome, or members of the Protestant Church of England. Many there are sitting on the opposite side of the House, and who, I almost fear, are prepared to vote for the second reading of this bill, who are *bound in the strongest manner, by solemn oaths, to uphold the two Universities*. I call upon the House, and upon these honourable members, to listen while I venture to read to them the oaths which they took when they were admitted into the Universities. I take the oath of matriculation at Cambridge, which the members of the opposite bench have taken. . . . The words of the oath, on proceeding to a degree, go even farther, and bind the party to maintain, not only the honour and dignity of the University—which he might contend he consults by admitting Dissenters—but even *the statutes, and ordinances*, and customs, which he cannot deceive himself in supposing that this bill upholds. The words on this occasion, addressed by the Vice-Chancellor to the party, are—'*Jurabis quod statuta nostra, ordinationes, et consuetudines approbatus observabis.*' I ask the honourable member for Wiltshire, and every other honourable member who has had the advantage of a university education, to consider the *nature of the oath* which they so solemnly took. *If there be faith in man—if there be any use in religious instruction*, I ask honourable members to pause before they vote in favour of the measure now before us. I do assure the noble Lord that *I do not quote these oaths in any other spirit than that in which I would wish him to address ME, if he believed that on any occasion I was incurring the risk of violating any such engagement.*"—(June 20, 1834, *Mirror of Parliament*, vol. iii. p. 2354.)

The whole reasoning in these quotations, is drawn from two places: the one, *the Rights of public Trustees*; the other, *the Obligation of the Academic Oaths*.

1. The reasoning from the former place—*the Rights of public Trustees*—is as follows:—Trustees created by and for the public, who have continued faithfully to discharge their duty, ought not (what the admission of the Dissenters, it is assumed, will actually occasion,) to be superseded or compelled to resign;—The governors and instructors of the English Universities are, and are admitted to be, such trustees;—Therefore, &c.

We have already stated, that we cordially join issue with our opponents in the principle of their argument; and our line of reasoning does not require that we should correct the terms in which their major proposition is expressed. We may, however,

notice, that, in the *first* place, it is inapplicable, inasmuch as the assumption through which it is connected with the minor,—that the opening of the Universities to the Dissenters would virtually compel the present trustees to resign,—will be shown, in treating of the reasoning from the latter place, to be unfounded: and, in the *second*, that though true, as far as it goes, it requires for absolute truth an extension also to *insufficiency*; seeing, that a public trust (saving always the interest of incumbents and independent of all private rights of property,) may justly, without any allegation of dishonesty or negligence in the trustee, be re-organized, or placed under a different management, the moment that the welfare of the public renders such a measure expedient. A trustee, *qua* trustee, has, against his truster, *duties but not rights*. His only claim of continuance, is his superior or equal competency to discharge the office. A University is a trust confided by the State to certain hands for the common interest of the nation; nor has it ever heretofore been denied, that a University may, and ought, by the State to be from time to time corrected, reformed, or recast, in conformity to accidental changes of relation, and looking towards an improved accomplishment of its essential ends. Under this extension the Dissenters would be safe. But waving all this, and taking the proposition simply as it stands, it is evident that if it be assumed by our opponents,—*That public trustees ought not to be superseded without a proof of negligence or abuse; multo magis*, must it be admitted by them, as implied in their own assumption, and by all as a proposition unconditionally true,—*That public trustees, on a proof of negligence or abuse, ought to be superseded*. On the hypothesis, therefore, of our proving, that the governors of either University have not only neglected or partially abused, but betrayed and systematically frustrated their whole great trust, these doughty champions of the collegial interest must, on their own principle, be, *presto*, metamorphosed into its assailants. Nor is such a proof to seek; it is already on record. To Oxford we limit our consideration, not that an equal malversation might not be established against Cambridge, but because we have only, as yet, proved our allegations of illegality and breach of trust, in relation to the former.

The Bishop of Exeter and Sir Robert Inglis, not only assert that no abuse of trust can justly be alleged against the Universities, (meaning of course in reference to Oxford, the Heads of

Houses, who are by law solely bound, and exclusively competent, to prevent, and who, consequently, have alone the power to tolerate and perpetuate abuses,) but that no one has ever dared to hazard such an allegation. "Is it," (says the former,) "can it be alleged, that either of the Universities, or that any of the Colleges within them, have violated the duties of their corporate character, or that they have abused the powers intrusted to them for the performance of those duties? My Lords, *no man has ventured, nor will any man venture, to say any of these things.*" And with equal confidence the latter avers that such abuse "*is not even alleged.*" Defiance like this, from such a quarter, was alone wanted to carry to its climax the history of that official treason of which the University of Oxford has been the prey; for not only has the abuse of trust in this venerable school been denounced by us as *unparalleled in the annals of any other Christian institution*, but our exposure of it has been so complete that those interested in its continuance,—those on whom defence was a necessity, moral and religious, have been unable to allege a single word in vindication.*

It is now above three years and a half since we published a principal, and above three years since we subjoined a supplementary, article on the subject. [Nos. iv. v. of this series.]

In these we stated, that though Great Britain, from the constituency of its unreformed Parliament, was by nature the happy paradise of jobs; yet that in that country the lawless usurpation of which the two great national Universities of England had been the victims, (from the magnitude of the public evil, and the singular character of the circumstances under which it was accomplished,) stands pre-eminent and alone. With more immediate reference to Oxford, we showed that it was at once conspicuous for the extent to which the most important interests of the public

* In deference to the common sense and common honesty of the collegial interest, we shall not consider two unparalleled pamphlets, published (by one of its Fellows, we presume) under the name of "A Member of Convocation," as representing more than the moral eccentricities of an individual. Our exposure is not to be refuted, by regularly quoting, as from us, particular passages we never wrote, and by systematically combating, as our argument, the very converse of every general position we actually maintained.

We are, however, pleased to see that the *Quarterly Review* has been driven to a similar tactic, in attempting to say something in answer to our recent article on the present subject, in its last Number. But we have no room at present to expose its misrepresentations.

had been sacrificed to private ends,—for the unholy disregard displayed in its consummation of every moral and religious tie,—for the sacred character of the agents through whom the unholy treason had been perpetrated,—for the systematic perjury it has naturalized in this great seminary of religious education,—for the apathy with which the public detriment has been tolerated by the State, the impiety by the Church,—and, last not least, for the unacquaintance so universally manifested with so flagrant a corruption.

1. We showed in the *first* place, *that a great breach of trust had been committed*.—That there were two systems of education to be distinguished in the English Universities; a *legal*, non-existent *in fact*, and an *actual*, non-existent *in law*; and that in Oxford no two systems could be imagined more universally and diametrically opposed—in *ends*—in *conditions*—in *means*.

In the Legal system, the *end*, for the sake of which the University is privileged by the nation, and that consequently imperatively prescribed by the statutes, is to afford public education in the faculties of Theology, Law, Medicine, and Arts, and to certify—by the testimony of a degree—that this education had in one or other of these faculties been effectually received.—In the Illegal, degrees are still ostensibly accorded in all the faculties: but they are now empty, or rather delusive, distinctions; for the only education at present requisite for all degrees, is the private tuition afforded by the colleges in the elementary department of the lowest faculty alone. Of ten degrees still granted in Oxford, all are given without the statutory conditions; and nine are, except for the privileges not withdrawn from them, utterly worthless.

In the Legal system, it is, of course, involved as *conditions*, that the candidate for a degree shall have spent a sufficient time in the University, and this in attendance on the public courses of that faculty in which he purposes to graduate.—In the Illegal, when the statutory education in the higher faculties, and the higher department of the lowest, was no longer afforded, these relative conditions, were, though indispensable by statute, replaced, in practice, by empty standing.

The Legal system, as its necessary *mean*, employs in every faculty a cooperative body of select Professors, publicly teaching in conformity to statutory regulation.—The Illegal, (in which the mutilated remnant of professorial instruction is little more

than a nominal appendage,) abandons the petty fragment of private education it precariously affords, as a perquisite, to the incapacity of an individual, Fellow by chance, and Tutor by usurpation.

England is thus the only Christian country, where the Parson, if he reach the University at all, receives only the same minimum of theological tuition as the Squire;—the only civilized country, where the degree, which confers on the Jurist a strict monopoly of practice, is conferred without either instruction or examination;—the only country in the world, where the Physician is turned loose upon society with extraordinary privileges, but without professional education or even the slightest guarantee for his skill.

2. We showed, in the *second* place, *by whom* the breach of trust had been committed.—The perfidious trustees were the *Heads* of the private corporations or Colleges in connexion with the University. The Colleges, though endowments limited to the members, are wholly extraneous to the corporation, of the University. Their *Fellows*, who, in general, obtain the situation from any other qualification than literary merit, far less from their capacity for instruction, are unknown even by name in the academical charters and statutes; and it is only at a recent date, and for private ends, that, by a royal ordinance, the Heads of these private corporations were unconstitutionally elevated into the incapable and faithless rulers of the public corporation, to which, *qua* college heads, they were and are wholly foreign. The Caroline statute, procured by the influence of Laud, bestowed on the heads of houses, 1°, the guardianship of the statutes, and, 2°, with the duty of watching over the improvement of the University, the initiative of every new law; the legislative power remaining always with the Convocation, *i. e.* the assembly of all the full graduates in connexion with the University. The academic Legislature, however, declare, that as the Heads and Chancellor are emancipated from the penalties of ordinary transgressors, "so on them there is laid a weightier obligation of conscience;" and "seeing that to their fidelity is intrusted the keeping and guardianship of the statutes, if (may it never happen!) through their negligence or inactivity, they suffer any statutes whatever to fall into desuetude, and to be, as it were, silently abrogated, IN THAT EVENT WE DECREE THEM GUILTY OF VIOLATED TRUST AND PERJURY."

3. In the *third* place, we exposed the interested *motives* and the paltry *means* which determined, and the *circumstances* which rendered possible, the universal frustration of the constitutive statutes, and consequent suspension of the University; for a University only exists as a privileged instrument of public education.

4. In the *fourth* place, we proved, *that the Collegial Heads themselves were fully conscious, that the change from the statutory to the illegal system is at once greatly for their private advantage, and greatly for the disadvantage of the University and nation.* For, rather than allow its merits to be canvassed, by venturing to ask for the actual system a legal sanction, even from a friendly House of Convocation, these betrayers of their public trust have gone on from generation to generation voluntarily perjuring themselves, and denying the privileges of the University to all who would not be constrained to follow their flagitious example.

Such was the burden of the accusation. The accused were the collegial interest and its heads,—the reverend governors of the University,—a class of churchmen who now resist the natural right of the Dissenters to education in the national seminaries, on the plea, that Oxford is, in their hands, less a school of learning than of pious orthodoxy, and who, heretofore pugnaciously alive on every trivial disparagement of their literary estimation, were now called forth by honour and by sacred duty to vindicate even their moral and religious respectability. In such circumstances, where silence was tantamount to confession, confession to disgrace, what does such unwonted, such unnatural torpidity proclaim?

“———Pudet hæc opprobra nobis
Et dici potuisse, et non potuisse refelli.”

This alone can explain or excuse their quiescence. Yet listen to the advocates of these self-confessing culprits. “My Lords, no man has ventured, nor will any man venture to say, either that they have omitted to perform the duties for which they were incorporated, or that they have abused the powers intrusted to them for the performance of their duties.” “Nemo, Hercule, nemo!”

“For who dare deem that Lais is unchaste?”

But in thus ignoring (in ignorance we are bound to believe) before the two Houses of Parliament, not only the delinquency, but its exposure, the advocates of the collegial interest did not, we

must admit, transcend the general unacquaintance of the Legislature with all that appertained to the constitution and history, the rights and interests of the Universities. Not a single voice was raised in either House to signalize the misstatement and to retort the argument. Indeed the most elementary ignorance of academical relations was manifested in the bill, and pervaded the whole course of the subsequent debates. The bill was preposterous, (we use the word in its proper signification,) and confounded what ought to have been, not only distinguished, but contrasted. The Dissenters could only claim admission into the Universities as *national schools*; but as national schools they had been suspended, and an intrusive private tuition allowed to usurp the place of the public education organized and privileged by law. But instead of first simply demanding, *what could not possibly have been refused*, the restoration of the Universities to their public and statutory existence, and with which restoration the universal admissibility of the lieges would have followed as a corollary; the Bill and its supporters *first* recognised the conversion of the national Universities into a complement of private corporations, and *then*, of course, were fairly defeated in their summary attempt, to deal with these private and sectarian colleges as with cosmopolite and Christian schools. It may, indeed it must, before long become a question how far the Colleges of Oxford and Cambridge should remain exclusive foundations. This question is, however, one of complicated difficulties, from the confliction, in every form and degree, of public expediency and private rights;—difficulties, which can hardly admit of an equitable solution by any general measure, but would require a special adjustment and compromise in the case of almost every separate corporation. In some colleges the fellowships could, without injustice, be at once thrown open, and unconditionally presented as the rewards of academical distinction; in others this could not be effected perhaps at all, or not without an adequate compensation. But the University and its education are not in the very least dependent on the colleges; and, in so far as these may be desirous of constituting a part of the general academical system, they are completely under the control of the University and State. The Colleges, as strictly limited to the members of their own foundations, are, indeed, governed by their private statutes and emancipated from the visitation of the University; but as *licensed houses of superintendence and tuition for the academical youth in general*, they can

either, by the University and nation, be deprived of their license altogether, or this conceded to them under any conditions which the public corporation or the State may find it expedient for the general advantage to impose. In so far as Colleges have, latterly, been opened to independent members, they are tantamount to Halls; and Halls were always subject to the regulations of the University. In our last article, we were wrong in not taking this distinction; and in admitting that, as the Colleges could not be compelled to receive any independent members at all, they could not be prevented from making a selection if they did. But the University has a right to say: The houses which we privilege to receive students, these we authorize every student to enter; the Colleges must therefore admit all willing to conform to their economy, or none. And considering them as incorporations, if their fellowships were thrown open as prizes of literary merit, they would of course contribute powerfully to the prosperity of the University; but if, as at present, they continued only to crowd the hive with drones, it would still be the fault of the University were they suffered any longer to operate as a direct impediment to its utility, by usurping, for their fellows, functions which they are rarely competent to perform.

But to return to our argument: To complicate questions of so clear and simple a solution as the right of Dissenters to admission into the national Universities, and the proper mode of rendering that right available, with the difficult and ravelled problems touching the various collegiate foundations of Oxford and Cambridge, is, to say the least of it, in every point of view highly inexpedient. It is often easy to drive a wedge where it is impossible to pass a needle. The great measure of a restoration of the *University*, in Oxford and Cambridge, to legal existence and unexclusive nationality could not be resisted; while the comparatively petty measure of opening, *brevi manu*, the English *Colleges* to the Dissenters was successfully opposed. A restoration of the University is, in fact, the only mode through which the Dissenters ought to condescend to accept admission—into Oxford at least. They were plainly told by a member of that University, an active supporter of their rights in Parliament, (Mr Vernon Smith,) that a hunted cur, with a kettle at his tail, was but a type of the manner in which a Dissenter would be baited in an Oxford College, under the spirit of the present system. Let that system be changed. Let the Tutorial instruction be elevated, the Professorial re-estab-

lished and improved. Let the youth of the University no longer imbibe only the small prejudices of small men. Let them be again presented with a high standard of erudition and ability. Let the public schools once more daily collect them in numerous classes to hear the words of wisdom and liberality, and to merge in a generous, sustained, and universal emulation, the paltry passions and contemptible distinctions which the isolation of the College coteries now breeds and fosters. Then will a Dissenter be as sure of civility and respect in Oxford, as in Leyden, Gottingen, Edinburgh, or even Cambridge. But in point of fact, if that be worthy of the attempt, the surest way of conquering an entrance into the Colleges is to make the University accessible,—and not through them. Let the University again be patent to every sect, with the Halls in the course of restoration; and, like a sulky Boniface, with the fear of a rival hostility before his eyes, every head of every College will, cap in hand, be fain to waylay the Dissenters at its gate, with bows and smiles, and a “Walk in, gentlemen!—Pray, walk in!” Decided symptoms, indeed, of this spasmodic complaisance have already been manifested.

It would be a sign of marvellous simplicity to believe, that the opposition of the collegial interest to the admission of Dissenters is principally, if at all, determined by religious differences and religious motives. If this admission were for the temporal advantage of the present usurpers of the University, we should hear no hypocritical clamour about their spiritual obligations. Their conscience is merely a stalking-horse, moved by their interest, and to conceal it. We make no allegations which we cannot prove. They protest, with tragic emphasis, against the admission of Dissenters; because, they say, they are bound by their academic oaths and statutes to exclude them. We are soon to show, that these statutes can be modified or rescinded by the State, and consequently the oath relieved. Their clamour is, therefore, idle. But we shall admit their hypothesis, and prove their hypocrisy notwithstanding. Suppose a legislature to impose two obligations; one comparatively strong, one comparatively weak. If, in these circumstances, a man can habitually violate the former, how shall he be designated should he vociferate against the constitutional repeal of the latter as an outrage on his conscience?—But this is not so strong as the case under consideration. The academic legislature of Oxford imposes two such obligations. The *stronger*, that, to observance of its statutes, is established on a solemn *oath*, which

is allowed only to be deliberately taken by members after attaining the age of sixteen. The *weaker*, that, to a belief in the Thirty-nine Articles, is established only on *subscription*; and so slight is the obligation held to be, by the very authority imposing it, that this subscription is lightly required (not merely of young men of sixteen, as marvellously stated by the Bishop of Exeter and all others in Parliament, but) of children entering the University, at the tender age of *twelve*. Now, with what face can the very men who have done *two* things:—in the *first* place, systematically outraged the stronger and more sacred obligation of the academic *oath*; and, in the *second*, done all in their power to attenuate to zero the weaker and less sacred obligation of the academic *subscription*:—with what face can they, when it is proposed by the State, to repeal this *subscription*, gravely call out against that measure as “*a persecution*,”—as a compelling them “to be parties to the desecration of what they hold to be most sacred, and to the destruction of what they deem to be most valuable in this life, because it is connected with the interests of the life to come?”—(Bishop of Exeter’s Speech, pp. 9, 10, 13.)—Have they not done the *former*? Has the collegial interest not frustrated every fundamental statute of the University—every statute opposed to its own usurpation of every necessary academic function? Have its Heads not themselves “desecrated” and compelled all others “to be parties to the desecration of what they hold [or ought to hold] to be most sacred, and to the destruction of what they deem [or ought to deem] most valuable in this life, because it is connected with the interests of the life to come,”—*their solemn oaths*?—They have equally done the *latter*. As we formerly observed,—and that previous to the agitation of the present question of the Dissenters’ claim,—the Heads have violated not only their moral and religious obligations to the University and the country, but in a particular manner their duty to the Church of England. By law, Oxford is not now unconditionally an establishment for the benefit of the English nation; it has been for centuries an establishment only for the benefit of those in community with the English Church. But the Heads well knew, that the man will *subscribe* thirty-nine articles which he cannot believe, who *swears* to do and to have done a hundred articles which he cannot, or does not, perform. In this respect, private usurpation was for once more (perversely) liberal than public law. Under the illegal system, Oxford has virtually ceased to be the seminary

of a particular sect; its governors impartially excluding all religionists or none. Nor is this all. The natural tendency of the academical ordeal was to sear the conscience of the patient to every pious scruple; and the example of "the accursed thing" committed and enforced by "the priests in the high places," extended its pernicious influence from the Universities, throughout the land. England became the country in Europe proverbial for a disregard of oaths; and the English Church, in particular, was abandoned, as a peculiar prey, to the cupidity of men allured by its endowments, and educated to a contempt of all religious tests.*

We are thus convinced that the collegial interest in Oxford have scruples, few and lightly overcome, to the admission of Dissenters, viewed as a measure *per se*. The consequences of that measure alone affright them.—In the *first* place, the Heads could not expect to find in the religionists of other sects, patients equally submissive in swallowing their catholicon of false swearing as members of the church in which they themselves stand high in station and authority; and any controversy on this point would inevitably determine a public inquiry into their stewardship, which they might be conscious it could not endure. Farewell then to the suspension of the University, and the usurpation of Tuition by the college Fellows. In the *second* place, an increased resort to the University would necessarily occasion an increase in the number of privileged houses; and consequently either divide the unconstitutional authority of the Heads, or (what is more probable) accelerate its end. The collegial interest, from sordid motives, is thus naturally opposed to the admission of the Dissenters; but if that admission cannot be avoided, the same sordid motives will influence their conduct under that alternative. Be sure, there will be no strike, for conscience sake, of the Fellow-Tutors, and the college Heads, as threatened by the Bishop of Exeter and Sir Robert Inglis. The interlopers will be found to stick to their job and wages, till

* [A signal proof of the accuracy of this deduction was manifested in Oxford, not long after the publication of this paper. I refer to the doctrine there promulgated touching the subscription of religious articles *in a non-natural sense*. This doctrine professedly holds, that such articles need not be believed by the subscriber, as intended by the imposer of the obligation, but may be taken in any meaning in which he, the subscriber, may choose to understand them. "Non-natural subscription" is, indeed, the natural result of the illegal system, so long tolerated in the English Universities; but I had hardly expected that this result would be thus openly avowed.]

turned out to make room for the regular workmen they have illegally expelled. In fact, the Heads have already left their two parliamentary champions in the lurch. We showed, in our last Number, how admission into an English University did not constitutionally depend on admission into a College; and thus obviated all rational objection to the Dissenters' claim. But as the restoration of the University and Halls was of more immediate danger to their interest than the admission of Dissenters to the Colleges, (the latter being mainly opposed only as a mean towards the former); and as the possibility of absolute exclusion, under circumstances, could no longer be expected; the Heads, throwing to the winds every dread vaticination of their parliamentary organs, prudently determined to choose of two evils the least, and had actually agreed to propose in Convocation a repeal of the *Academic Test*. But lest it might ever possibly be imagined that this change of measures was determined by any new light thrown upon their duty, it curiously happened, that hardly had the project of repeal been by them resolved on, than the reforming Whigs were dismissed, and the Tory conservatives recalled to power. Forthwith, *their resolution was rescinded!*

But to return:—Will Dr Philpotts and Sir Robert Inglis conscientiously deny, that a public trust was confided to the Oxford Heads, and that this trust has been by them betrayed? If they cannot, they must either desert their principles, or join with us in calling for a deprivation of these unfaithful stewards.

II. The reasoning from the second place,—*the Obligation of the Academic Oath*,—is to the following purport:—All members of the English Universities are bound by the most solemn oaths to maintain and observe the academical statutes:—These statutes prohibit the admission of Dissenters;—therefore, in the first place, the passing of the Dissenters' Bill in Parliament, by causing a confliction between the law of the State and the law of the University, would constrain the administrators and teachers of Oxford and Cambridge, either to violate their spiritual obligations, or to sacrifice their temporal interests; while, in the second, members of either House of Parliament who are, or have been, members of either University, would, by supporting or not opposing the claim of the Dissenters, incur the guilt of perjury.

This reasoning, though allowed to pass in Parliament, has every vice of which reasoning is capable.—It is, in the *first* place, harmless to those against whom it is directed; and, in the *second*, fatal

not only to the special case in question, but to the general cause of those by whom it is employed. We shall consider it in this twofold relation :—1°, As an argument against the Dissenters; 2°, As an argument by the Collegial interest.

1. *As an Argument against the Dissenters.*—The validity of this argument supposes the truth of one or other of two assumptions, both of which are utterly, and even notoriously false. It supposes, either that the sovereign legislature has not the right of making and unmaking the statutes of the national schools, or that a competent authority having once imposed an oath to the observance of certain laws, the same authority cannot afterwards relieve from that obligation, when it abrogates the very laws to which that oath is relative. Of these assumptions, the latter is sufficiently refuted by the very terms of its statement, and the former requires only a removal of the grossest ignorance to make its absurdity equally palpable.

It will not be contended that the King, Lords, and Commons, cannot do that to which the King singly is competent. If, therefore, it can be shown that the Crown, alone, has the right either of sole or paramount legislation in the English Universities, it will not be maintained that this right is null, when exercised by the Crown, plus the two Houses of Parliament. Again: it will not be pretended that Universities have in themselves any native right of legislation, or that they can exercise such right otherwise than as a power delegated to them for public purposes by the supreme authority in the State. But if the supreme authority can delegate, it can consequently perform a function; and, therefore, all academical legislation, however absolutely devolved, is of its very nature subordinate to, and controllable by, the authority on which it is dependent for existence. But, in regard to the English Universities, the case is far weaker; there has, in fact, to them been either no delegation at all, or this delegation has been only partial and precarious.

In regard to *Cambridge*,—and to the oaths taken in that University in observance of its statutes, Sir Robert Inglis confines himself*—there can be no doubt or difficulty whatever. The Crown has there never delegated, except in mere matters of

* [Why has the Member for *Oxford* confined himself to the University of *Cambridge*? Perjury can be rebutted, as it can be established, more easily and conclusively, where, as in *Oxford*, the statutes have been fully and authoritatively published, than where, as in *Cambridge*, they have not.]

detail, the power of legislation to any academical body. The whole organic laws of that University flow immediately from the King; and the King may at any moment withdraw all or any of the statutes, and relieve from all or any of the oaths, which it has pleased him to impose. The Royal Statutes minutely determine the academic constitution, the organization of teachers, the mode and the conditions of instruction and exercise; while there is only permitted to the Chancellor and a majority of the Heads of Houses the interpretation of what in these statutes may be found doubtful or ambiguous.* (Stat. Eliz. cap. 50); and to the Chancellor and *whole* University the privilege of ratifying new laws conducive to the welfare of the institution, but this only in so far as these *Graces* do not derogate from, nor prejudice, the statutes established by the Crown (Stat. Eliz. cap. 42). Not that the actual state of that University is legal, or the oaths taken by all for observance of the statutes are not there, as in Oxford, broken by all for the private advantage of the academical rulers. But, speaking of Cambridge, as existing not in *reality* but in *law*: in that seminary, the Crown has only to remove the impediment which it originally placed to the admission of Dissenters; and the University will be at once restored to its natural state, of a national, of a European school. It may, however, be noticed, as characteristic of the opposition now made to the Dissenters, that the very men who, in Cambridge, coolly take and deliberately *violate* every solemn oath to the observance of the *established* statutes, when contrary to their petty interests, do, when these petty interests persuade, vociferate before God and man, that they are to be robbed either of their salvation or subsistence; because, forsooth, perjury would be imposed on them by the non-enforcement of a non-existent law! Strange, that the throats which thus pleasantly can bolt a camel, should be so painfully constricted at the prospective phantom of a gnat!

In *Oxford*, although the Crown has permitted to Convocation a greater measure of legislative power than in Cambridge to the Senate; it has done this only in conjunction with, and in subordination to, itself. The King has here always continued to exert, both the power of original legislation, and the power of controlling the acts of the academical body to which it has pleased

* ["The benign interpretations" (to use Serjeant Miller's expression) of the Cambridge Heads, have, however, in the teeth of oath and statute, been perverted into an actual legislation. See above, p. 434, note.]

him to depute the partial and subordinate exercise of this power. The deplorable ordinance by which the ancient and natural constitution of the University was subverted, and its efficiency thereafter gradually annihilated,—(we mean the Caroline statute, which conferred on the Heads of Houses the guardianship of the old and the initiative of the new laws—*i. e.*, abandoned the welfare of the national school to the perfidy of a private body incompetent to its maintenance, and directly interested in its ruin,)—is an example of a royal statute, which, we trust, will, before long, by another royal statute, be repealed. The history of the University does not afford a single instance of the subordinate legislature (the House of Convocation) venturing to reject a statute prescribed by the paramount lawgiver (the King); while all enactments of any general importance, as, for example, the ratification of the code of statutes, were not only rendered valid by the royal confirmation, but these, though formally originating in the University, were usually, in fact, enjoined to the academical legislature by the Sovereign. But not only does the academical legislature of Oxford enjoy no rights available against the State; in point of fact, the body to which alone the legislative power was originally intrusted, does not now exist; the delegation is consequently at an end. The country, the King, and the University confided the right of subordinate legislation in the national school of Oxford to a body of men notoriously qualified to this important function, by a certain known and statutory course of public instruction, exercise, and examination. That necessary, that privileged course of education is no longer given; with the qualifying condition, the qualified body is virtually at an end; and, with the actual suspension of the university education, the right of university legislation ought likewise to be suspended. The pretended rights of that perjured interest which now usurps the place of the University, and of the instruments through whom it ostensibly carries on the acts of what, in law and reason, no longer exists, are treated with too much deference, when treated with derision.

Thus to the Crown alone,—*ex abundantia*, to the Crown and the two Houses of Parliament in conjunction, does the supreme right belong of repealing, as of ratifying, the statutes of either University. What then becomes of the argument, that the repeal of the academic tests by King, Lords, and Commons, as it could not alter the academic statutes to which the members of the two Universities are sworn, would consequently reduce the

academical authorities to the alternative of perjury or resignation?

2. *As an Argument by the Collegial interest.*—But as the principle, (which no moral intelligence can dispute,) that the State should by no act, occasion, countenance or permit the crime of perjury among its subjects, is found wholly irrelevant, as applied by the advocates of the interloping interest in the Universities, against the Dissenters; let us try how the same principle will work, when retorted against the very party in whose hands it has proved so ineffectual a weapon.

In the *first* place, it will be admitted, that it is the common duty of *every member of the national legislature* to do all that in him lies to obviate the causes, and to quell the perpetration of so grievous a sin in any class or department of the community; and that the obligation of this duty rises, in proportion as the atrocity of the crime, and its contagious virulence, are enhanced by the social rank and sacred character of the perjurers. But when a violation, the most aggravated, of the religious bond itself, is committed in the act of sacrificing the greatest of all public trusts on the altar of a private interest; the sufferance of the perjury and malversation by the national legislature for one unnecessary moment after its exposure, becomes a reproach to every representative of the country who hesitates to raise his voice against the abomination.

Of all nations in the world, past or present, Pagan or Christian, the English is the one infamous for a contempt of religious obligations; and if on any national wickedness the wrath of God is to be visited, we may soon have reason to lament with Jeremiah, that “because of swearing the land mourneth.” Confining ourselves to Episcopal authorities:—Bishop Sanderson (in his *Prelections on the Obligations of an Oath*, delivered in the University of Oxford, nearly two centuries ago,) warns his countrymen, that “as the *harvest of universal perjury* is already white and ready for the sickle, so perfidious and profane a people ought to dread an utter extirpation at the hands of the divine justico;” and he mainly attributes the grievous calamities of his generation to the endemic crimes of useless swearing and hypocritical perjury. Bishop Berkeley, in his *Essay towards preventing the Ruin of Great Britain*, near a century thereafter, enumerates, among the principal causes of our decline, false swearing:—“a *national guilt* which we possess in a very eminent degree; there being no nation

under the sun, where *solemn perjury is so common*;—in so much that men now-a-days break their fast and a customhouse oath with the same peace of mind." He then calls on the legislature to adopt means towards its prevention; "for whatever measures are taken, so long as we lie under such a load of guilt as *national perjury* and national bribery, it is impossible we can prosper."

But if the perjury of England stand pre-eminent in the world, the perjury of the English Universities, and of Oxford in particular, stands pre-eminent in England.

In Oxford, not only is the nation defrauded of nearly all the benefits, for the sake of which this the most important of all national corporations was specially organized and exclusively privileged; but the moral and religious wellbeing of the people sustains an injury, for which the sorry instruction still attempted in the place affords but a slender compensation. The exclusive privileges which Oxford and Cambridge still retain, render them the necessary or the favoured portals through which, in England, the Church and the professions must be entered; and thus the English Universities continue by these privileges to be thronged, when the conditions on which they were conceded are no longer fulfilled. Compared with Oxford as it is, there is not a European University, out of England, where the circle of academical instruction attempted is so small; and where the little taught is (in general) taught by so inadequate a teacher. But if the youth of England can, in Oxford, learn less of speculative knowledge than in any extra-Anglican university, they have, however, here a school of practical morality and religion, such as no Christian university, out of England, is competent to supply. Oxford is now a national school of perjury. The Intrañt is made to swear that he will do, what he subsequently finds he is not allowed to perform. The Candidate for a degree swears that he has done, what he has been unable to attempt; and perjures himself, by accepting, from a perjured Congregation, an illegal dispensation of performances indispensable by law. The Professor swears to lecture as the statutes prescribe, and he does not. The reverend Heads of Houses, the academical executive, swear to see that the laws remain inviolate, and the laws are violated under their sanction; they swear to be vigilant for the improvement of the University, and in their hands the University is extinguished; they swear to prevent all false oaths, and, for their own ends, they deliberately incur the guilt of perjury themselves, and

anxiously perpetuate the universal perjury of all under their control. The academic youth have thus the benefit of early practice and of high example. They here behold at what account religious obligations are held by the very guardians of the sanctuary; and how lightly their spiritual guides sacrifice to temporal advantage their own eternal interests, and those of all confided to their care. Is it marvellous that England is a by-word among the nations, when the fountains of English morality and religion are thus poisoned at their source? How long is this to be endured?

But, in the *second* place, it is not only the common duty of every national representative, to see that no perjury be tolerated in any quarter, and least of all, in the very well-springs of public religion and morality, the privileged national schools; it is in a still higher degree, the especial duty of those *members of the Legislature, who are also members of either University*, to take care that every thing be done by Parliament towards upholding the statutes of these establishments, which they themselves have solemnly sworn to observe. On this ground, Sir Robert Inglis called, in the most emphatic language, on those members of the House of Commons who had taken the academic oaths, to oppose, on the alternative of perjury, the passing of the Dissenters' Bill; and this on the hypothesis, that by no act of the national Legislature could a University statute be repealed, and those relieved of their obligation who had sworn to its observance. We have already shown that such an hypothesis is null; and shall not attribute to Sir Robert the absurdity of holding, that oaths to obey a code of laws preclude the swearer from ever co-operating towards its improvement, by the modification or repeal of inexpedient enactments.—But if ineffectual against others, is Sir Robert's argument inconclusive against himself? He certainly challenges the retort. "I know," he says, "how unpopular the practice is in this House of ever referring to the oaths which any honourable member has taken, but I will not shrink from that duty;" and after adjuring them by their religious obligations, he assures his opponents "that I do not quote these oaths in any other spirit than that in which I would wish them to address me, if they believed that on any occasion I was incurring the risk of violating any such engagement." We shall put him to the test.

Sir Robert has solemnly made oath in Oxford, once at matri-

ulation, and thrice at least at the various steps of graduation, "*ad observandum omnia statuta, privilegia, consuetudines et libertates hujus Universitatis*;" and this oath he himself explains as obligating, not merely to a passive compliance with the statutory enactments, but to an active maintenance of their authority. "It binds," he says, "the party to maintain, not only the honour and dignity of the University, *but even the statutes and ordinances.*"

Now, Sir Robert is far more than a man of sense and honour; yet as a mere man of sense and honour, and referring him for proof to our two articles on the English Universities, [Nos. iv. v.] we know and assert that he cannot, and will not deny, the following propositions:—1°, That Oxford *de facto*, and Oxford *de jure*, are fundamentally different—nay, diametrically opposite. 2°, That all members of the University are sworn to the observance of the statutes thus violated and reversed. 3°, That those proceeding to a degree without fulfilling all indispensable conditions, are declared perjured by statute, and no graduate now fulfils even the most important of these. 4°, That the Heads of Houses are appointed to watch over the faithful observance of the statutes, and "decreed guilty of violated trust and perjury, if by their negligence or sloth any statute whatever be allowed to fall into desuetude," and through them every fundamental statute is suspended. 5°, That the Heads of Houses possess the initiative of every legislative enactment, and have yet neither brought, nor allowed to be brought, into Convocation, any measure tending to put an end to this state of illegality and universal perjury.—These facts (of which we have fully explained the how and why) Sir Robert Inglis will not, we are assured, *as an honourable, not to say religious, man*, deny; for disprove them, we know, he cannot. We call on him, therefore, to fulfil his professions—"to uphold the Universities, and maintain their statutes, as bound in the strongest manner by solemn oaths." "We ask" (his own words) "the honourable member to consider the nature of the oath which he so solemnly took. If there be faith in man,—if there be any use in religious instruction," any confidence in religious profession, we conjure the representative of Oxford University to lend the valuable aid of his character and talents in restoring that venerable seminary to a state of law and usefulness,—to raise it at least from religious opprobrium to religious respectability.

In like manner, and on the same hypothesis,—if the Bishop of Exeter would not prove a traitor to his sacred character,—if, as he says, he would “keep inviolate his academic oath,” and not “become a party to the desecration of what he holds to be most sacred, and to the destruction of what he deems to be most valuable in this life, because it is connected with the interests of the life to come,” he will actively co-operate to the same hallowed end.

But there is another and a more important ally who is bound by the most transcendent duty to lend his aid to the cause,—we mean the Chancellor of the University of Oxford, the Duke of Wellington. On his installation in that distinguished office, he made public and solemn oath to “*defend and to keep entire (tueri et conservare) all and each of the statutes, liberties, customs, rights, and privileges of that University without partiality, well, and faithfully, to the best of his ability, and in so far as they should be brought to his knowledge.*” The Chancellor is the supreme magistrate of the public corporation of the *University*; not of the private corporations of the Colleges. His oath binds him to maintain the legal integrity of the University, and University alone; he is clothed with power to prevent the breach or frustration of any of its statutes; which, if he knowingly permit, he is proclaimed by academic law “a perjured violator of his trust,” and the pedestal of his dignity is converted into the pillory of his shame. But we have better hopes of the Duke of Wellington. He is not the man to compromise the interests of his glory to the paltry ends of any; nor will he allow himself, we are assured, to be played as their puppet—their *âme damnée*—by such a body as the Oxford Heads. His speeches on the Dissenters’ Admission Bill show him to have been grossly misled in regard to the nature of the academic oath; but his error was then excusable. It is, however, his duty not to remain obstinate in ignorance. This excuse may have been competent to former Chancellors; it is not to the present; and let him study the subject for himself, or let him obtain the opinion of any respectable lawyer, and, sure we are, the present Chancellor of the University of Oxford will not be on the list of its perjured betrayers.

But, we have heard it said, that, admitting the truth of our allegations, it is for the interest of religion to cloak the offences of its ministers, whilst the terms, “perjured violators of their trust,” &c., though appropriate to the offence, and not unsuitable

to ordinary offenders, are, at the best, harsh and unseemly when applied to a class of dignified divines. To this, we answer:—

In the *first* place, these, the severest epithets we use, are those of the *statutes themselves*, which confer upon the Heads of Houses a public authority to abuse; and are by them prospectively affixed to the very lowest degree of that abuse, of which we have been obliged to characterise the very highest. The statutes apply them to the only breach of trust which the legislature contemplated as possible, the less careful enforcement of some unessential enactment; we, to the deliberate and interested frustration of every fundamental law. In fact, if the thing is to be said at all, unless

“Oaths are but words, and words but wind,”

it can be said in no other, in no milder terms.

In the *second* place, it is blasphemous to hold that religion is to be promoted by veiling the vices of its ministers; and foolish not to see that these vices are directly fostered by concealment and toleration.

In the *third* place, so far is the sacred profession of the offenders from claiming for them a more lenient handling of their offence, it imperiously calls down upon their heads only a severer castigation. The holier the character of the criminal, the more heinous the aggravation of the crime. The lesion of moral and religious principle in the delinquent himself, and the baneful influence of his example on society, are in the present instance carried to their climax by the very circumstance that the “perjured violators of their trust” had clothed themselves with the character of religious teachers; and in virtue of that character alone were enabled to manifest to the world a detestable proof of how diametrically opposite might be the practice and the precept of a priesthood. It is not that one man forswears himself in a smock frock, another in a cassock and lawn sleeves,—it is not that an illiterate layman commits in ignorance a single act, and a graduated churchman perpetrates half a lifetime of perjury, with full consciousness of the transgression and its atrocity,—it is not that the former gains a dinner and contempt, by cheating government of a few pounds, the latter wealth and consideration by violating his public trust, and defrauding the Church, the professions, the country, of their education,—it is not that the one offender may grace the pillory, the other the pulpit and the House of Peers;—these are not surely circumstances that can

reverse the real magnitude of the two crimes, either in the estimation of God, or in the eyes of reasonable men. Why, then, repress the moral indignation that such delinquency arouses? Why stifle the expression in which that indignation clothes itself? But though there be no call for such restraint, we have imposed it. We have spoken plainly, as in duty bound, but without exaggeration as without reserve.

"Dicenda pictis res phaleris sine,
Et absque palpo. Discite strennum
Audire Verum. Me sciente
Fabula non peragetur ulla.

"Non est meum descendere ad oscula
Impura Famæ et fingere bractæas;
Larvisque luctari superbis,
Aut nimias acuisse laudeis."

Nor do we hazard our imputations, if unfounded, with impunity. We do not venture an attack, either agreeable in itself, or where defeat would be only fatal to the defender. We deeply feel, that the accusation of a betrayal of trust, self-seeking and perjury, to whomsoever applied, is of the most odious complexion; and that the accuser, if he fail in establishing his proof, receives, and ought to receive, from public indignation, an almost equal measure of disgrace with that reserved for the accused, if unable to repel the charge. But when this charge is preferred against a body of men, the presumption of whose integrity is founded on their sacred character as clergymen, on their hallowed obligations as the guides, patterns, instructors of youth, and on their elevated station as administrators of the once most venerable school of religion. literature and science in the world; what must be our conviction of its importance, of its truth and evidence, when we have not been deterred from the painful duty of such an accusation, by the dread of so tremendous a recoil!

And in reference to the actual Heads, it is now nearly four years since we first exposed the fact and the illegality of the present suspension of the University, with the treason and perjury through which that suspension was effected, and is maintained. In our exposition we were, however, anxious to spare, as far as possible, the living guardians of the University and its laws, and to attribute rather to an extreme, an incredible, ignorance of their duty, what would otherwise resolve into a conscious outrage of the most sacred obligations. But since that period the benefit of this

excuse has been withdrawn. The Heads cannot invalidate the truth of our statements or the necessity of our inferences; they have, therefore, in continuing knowingly, and without necessity, to hold on their former lawless course, overtly renounced the plea of *ignorance* and *bona fides*, and thus authorised every executioner of public justice to stamp the mark, wherewith the laws, by which they are constituted and under which they act, decree them as a body—as a *body*, to be branded.*

* [On the false swearing practised and imposed in Oxford and Cambridge, I may refer, (besides Dr Peacock's Observations, ch. li.,) to Mr F. W. Newman's edifying Note 99, appended to the translation (from another hand) of "The English Universities," by Professor Huber of Marburg, published in the year 1843. The annotation, here as in many other places, justly bristles against the text. Indeed, with reference to the original, I may remark, that the work was hardly worthy of a version, replete as it is with erroneous statements, in consequence, principally, of the author's want, not only of personal experience, but of the most indispensable sources of special information, besides his deficient acquaintance with academical history in general. He was confessedly without the great work on the subject, Wood's "History and Antiquities of the University of Oxford," &c., possessing only that author's mutilated "Historia et Antiquitates," &c.; nor does he seem even to have had access to the "Corpus Statutorum Universitatis Oxoniensis." Dipping merely into the work, among other mistakes;—in Oxford, Huber confounds *Schools* and *Halls*, and knows nothing of "*The Street*," which, however, was even more celebrated in that University than in Paris and Louvain (§ 227); he puzzles himself about the difference of *Congregation* and *Convocation*, or the *Great Congregation*, (§ 230, note 56); he wholly mistakes the office and constitution of the *Black Congregation*, (§ 257, notes 72, 80); he misrepresents the age of admission into the University, and the statutory commencement of attendance on the statutory public courses (§§ 299, 301, note 74); &c. &c.

Since the above was written, I have seen the "Oxford University Statutes, translated by G. R. M. Ward, Esq. M.A., Late Fellow of Trinity College, and Deputy High Steward of the University of Oxford;" 1845. I am happy to find, that all the most important of my statements in regard to the University of Oxford are confirmed by the high official authority of Mr Ward; and not one of them gainsaid. See his able and candid Preface, throughout. (1853.) The same confirmation is afforded by the late Report of the Oxford Commissioners. I see also, by that Report, that the Oath to observe the Statutes of the University was, in 1838, rescinded by Convocation. (P. 147 et alibi.) I make no remarks.]

VIII.—COUSIN ON GERMAN SCHOOLS.*

(JULY, 1833.)

1. *Rapport sur l'état de l'Instruction Publique dans quelques pays de l'Allemagne, et particulièrement en Prusse.* Par M. VICTOR COUSIN, Conseiller d'Etat, Professeur de Philosophie, Membre de l'Institut et du Conseil Royal de l'Instruction Publique. 8vo. Nouvelle édition. Paris: 1833.
2. *Exposé des Motifs et Projet de Loi sur l'Instruction primaire, présentés à la Chambre des Députés,* par M. le Ministre Secrétaire d'Etat de l'Instruction Publique. Séance du 2 Janvier, 1833.

THE perusal of these documents has afforded us the highest gratification. We regard them as marking an epoch in the progress of national education, and directly conducive to results important not to France only, but to Europe. The institutions of Germany for public instruction we have long known and admired. We saw these institutions accomplishing their end to an extent and in a degree elsewhere unexampled; and were convinced that if other nations attempted an improvement of their educational policy, this could only be accomplished rapidly, surely, and effectually, by adopting, as far as circumstances would permit, a system thus approved by an extensive experience, and the most memorable success. Our hopes, however, that the example of Germany could be turned to the advantage of England, are but recent. What could be expected from a Parliament, which, as it did not represent the general interests, was naturally hostile

* [This article was, I believe, the first publication in this country, which called attention to what was doing in France, and had long been done in Germany, for the education of the people. We are indebted to Mrs Austin (among her other admirable translations) for versions of this and subsequent Reports by her celebrated friend M. Cousin, on national education.]

to the general intelligence, of the people? What could be expected from a Church which dreaded, in the diffusion of knowledge, a reform of its own profitable abuses? But, though unaided by Church or State, the progress of popular intelligence, if slow and partial, was unremitted. The nation became at length conscious of its rights: the reign of partial interests was at an end. A measure of political power was bestowed upon the people, which demanded a still larger measure of knowledge; and the public welfare is henceforward directly interested in the moral and intellectual improvement of the great body of the nation. The education of the people, as an affair of public concernment, is thus, we think, determined. As the State can now only be administered for the benefit of all, Education, as the essential condition of the social and individual well-being of the people, cannot fail of commanding the immediate attention of the Legislature. Otherwise, indeed, the recent boon to the lower orders of political power, would be a worthless, perhaps a dangerous gift. Intelligence is the condition of freedom; and unless an Education Bill extend to the enfranchised million an ability to exercise with judgment the rights the Reform Bill has conceded, the people must still, we fear, remain as they have been, the instruments, the dupes, the victims of presumptuous or unprincipled ambition. "A man," (says Dr Adam Smith, who in this only echoes other political philosophers,)—"a man, without the proper use of the intellectual faculties of a man, is, if possible, more contemptible than even a coward, and seems to be mutilated and deformed in a still more essential part of the character of human nature. Though the State was to derive no advantage from the instruction of the inferior ranks of the people, it would still deserve its attention, that they should not be altogether uninstructed. The State, however, derives no inconsiderable advantage from their instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people, besides, are always more decent and orderly than an ignorant and stupid one.* They

* The following paragraph we translate from an Austrian newspaper, (*Observer*), of November 1820. The writer is speaking of the disturbances which were then excited in many of the German towns against the Jews, but from which the provinces of Austria remained wholly exempt. "In all that regards the education of the lower orders of the people, through national

feel themselves, each individually, more respectable, and more likely to obtain the respect of their lawful superiors, and they are therefore more disposed to respect those superiors. They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition; and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of Government. In free countries, where the safety of Government depends very much upon the favourable judgment which the people may form of its conduct, it must surely be of the highest importance that they should not be disposed to judge rashly or capriciously concerning it." (Wealth of Nations, B. v. c. 1. Art. 2.)

Those (if there are now any) who argue against the expediency of universal education, are not deserving of an answer.—Those who, admitting this, maintain that the supply of education should, like other articles of industry, be left to follow the demand, forget that here demand and supply are necessarily co-existent and co-extensive;—that it is education which creates the want which education only can satisfy.—Those again who, conceding all this, contend that the creation and supply of this demand should be abandoned by the State to private intelligence and philanthropy, are contradicted both by reasoning and fact.—This opinion, indeed, has been rarely advanced in all its comprehension. Even those (as Dr Adam Smith) who argue that the instruction of the higher orders should be left free to private competition, still admit that the interference of the State is necessary to ensure the education of the lower. All experience demonstrates this. No countries

establishments of instruction, there is hardly a country in Europe that, in this respect, has the advantage of the Austrian States. The peasant in the country, the artisan in the town, must, throughout these dominions, have given due attendance at school. Without the certificate of education and adequate proficiency, no apprentice is declared free of his craft; and without examination on the more important doctrines of religion, no marriage is solemnized. Even the military receive all competent instruction in the elementary branches of knowledge, through masters who, for this purpose, are trained to the business of teaching in the normal schools. But in proportion as education is diffused, is the possibility diminished of the outbreaks of a rude ferocity; the more universal the instruction of the lower orders, the more harmless becomes the influence which the ill-educated can exert upon the sound judgment of those who thus virtually *cease to be any longer a part of the populace.*"

present a more remarkable contrast in this respect than England and Germany. In the former, the State has done nothing for the education of the people, and private benevolence more than has been attempted elsewhere; in the latter the Government has done every thing, and left to private benevolence almost nothing to effect. The English people are, however, the lowest, the German people the highest, in the scale of knowledge. All that Scotland enjoys of popular education above the other kingdoms of the British Empire, she owes to the State; and among the principalities of Germany, from Prussia down to Hesse-Cassel, education is uniformly found to prosper exactly in proportion to the extent of interference, and to the unremitted watchfulness of Government. The general conclusion against the expediency of all public regulation of the higher instruction, is wholly drawn from particular instances of this regulation having been inexpediently applied. Even of these, the greater number are cases in which the State, having once conceded exclusive privileges under well-considered laws, never afterwards interposed to see that these laws were duly executed, and from time to time reformed, in accommodation to a change of circumstances. The English Universities, it is admitted, do not, as actually administered, merit their monopoly. But, from this example, we would not conclude, with Smith, that all privileged seminaries are detrimental. On the contrary, by showing that in Oxford and Cambridge the statutory constitution has been silently subverted, we should argue that their corruption does not originate in the law, but in its violation; and from the fact that, while now abandoned by the State to private abuse, they accomplish nothing in proportion to their mighty means, we should only maintain more strongly the necessity of public regulation and superintendence to enable them to accomplish every thing. The interference of the Government may sometimes, we acknowledge, be directly detrimental; and indirectly detrimental, we hold that it will always be, unless constant and systematic. The State may wisely establish, protect, and regulate; but unless it continue a watchful inspection, the protected establishment will soon degenerate into a public nuisance—a monopoly for merely private advantage. The experience of the last half century in Germany, has indeed completely set at rest the question. For thirty years, no German has been found to maintain the doctrine of Smith. In their generous rivalry, the Governments of that country have practically shown what a bene-

volent and prudent policy could effect for the university as for the school; and knowing what they have done, who is there now to maintain,—that for Education as for Trade, the State can prevent evil, but cannot originate good?

There are two countries in Europe which have excited the special wonder and commiseration of the honest Germans;—wonder at the neglect of the Government,—commiseration for the ignorance of the people. These countries are *France* and *England*. The following is the last sample we have encountered of these feelings:—

“ THINGS INCREDIBLE IN CHRISTENDOM.

“ England, in which country alone there are annually executed more human beings than in several other countries taken together, suffers two millions of her people to walk about in utter ignorance, and abandons education to speculation and chance as a matter of merely private concernment;—we mean the elementary instruction of the lower orders, for learning there possesses as extensive, wealthy, noble, [and maladministered] establishments as are anywhere to be found upon the globe. According to the documents before us, it appears that out of a population of nine millions and a half, there are above *two millions* without schools for their children. In London, according to an accurate estimate, *one-fourth* of the inhabitants are thus destitute. No wonder assuredly that erimo is rife!—In France, likewise, of forty-four thousand *communes*, twenty-five thousand (more than a half) are without schools; since the restoration of the King, above four hundred cloisters have been re-established; but schools — What a blessed contrast is presented to us by our German fatherland!” *

Of these two partners in disgrace, France, which, even after the decline of popular schools consequent on the first revolution, remained far ahead of England in the education of the lower orders,—France has been the first to throw off the national opprobrium, and has made a glorious start in the career of improvement. The revolution of July gave the signal. Almost the first act of the liberated State was an attempt to meliorate the system of public education, of which the education of the people constitutes the foundation; and the enterpriso has been continued with

* Literaturzeitung fuer Deutschlands Volksschullehrer, 1824, Qu. 4. p. 40.

a perseverance fully equal to its promptitude. To show how much has been accomplished in so short a period, we quote the concluding paragraph of M. Cousin's *Exposé*.

" In fact, gentlemen, experience is our guide. This alone have we been anxious to follow, and this alone have we constantly pursued. There is not in this law to be found a single hypothesis. The principles and the procedures there employed have been supplied to us by facts; it does not embrace a single organic measure which has not been already successfully realized in practice. In the matter of public education, we are convinced, that it is of far greater importance to regularize and meliorate what exists, than to destroy, in order to invent and renovate on the faith of hazardous theories. It has been by labouring in conformity to these maxims, but by labouring without intermission, that the present administration has been able to bestow on this important part of the public service a progressive movement so vigorous and regular. But we may affirm, without any exaggeration, that there has been more done for primary education by the Government of July, during the last two years, than by all the other Governments during the preceding forty. The first Revolution was prodigal in promises, but took no care of their fulfilment. The Empire exhausted its efforts in the regeneration of secondary instruction, and did nothing for the education of the people. The Restoration, until the year 1828, annually devoted 50,000 francs (£2083) to primary instruction. The Minister of 1828 obtained from the Chambers 300,000 francs (£12,500). The Revolution of July has given us annually a million, (£43,330); that is, more in two, than the Restoration in fifteen years. Such were the means; attend now to the results. You are aware, gentlemen, that primary instruction is wholly dependent on the primary normal schools.* Its progress is correspondent to that of these establishments. The Empire, under which the name of primary normal school was first pronounced, left but one. The Restoration added five or six. We, gentlemen, in two years, have not only perfected those previously existing, of which some were only in their infancy, but have established more than thirty, of which twenty are in full exercise—forming in each department a great focus of illumination for the people. Whilst Government was carrying roads through the departments of the West, we there disseminated schools: we were cautious in meddling with those dear to the habits of the country; but have founded in the heart of Brittany the great normal school of Rennes, which will be soon productive, and surrounded it with similar establishments of different kinds—at Angers, at Nantes, at Poitiers. The South has at present more than five great primary normal schools, of which some are already, and others will be soon, at work. In fine, gentlemen, we believe ourselves on the road to good. May your prudence appreciate ours; may your confidence sustain and encourage us; and the time is not distant when we shall be able to declare together—ministers, deputies, departments, communes—that we have accomplished, in so far as in us lay, the promises of the Revolution of July, and of the charter of 1830, in all

* Seminaries for training primary schoolmasters. [A name now familiar.]

that more immediately relates to the education and true happiness of the people."—(P. 17.)

Such was the memorable progress made previous to the commencement of the present year, when the important Law on Primary Instruction was ratified. But this progress and this law were professedly the offspring of experience. Of what experience? Not of the experience of France,—of the very country whose whole educational system stood in need of creation or reform,—but of that country whose institutions for instruction were, by all competent to an opinion, acknowledged to afford the highest model of perfection. In resolving to profit by the experience of the German states, and in particular of Prussia, we cannot too highly applaud the wisdom of the French government. Nor could a wiser choice have been made of an individual to examine the nature of the pattern institutions, and to report in regard to the mode of carrying their accommodation into effect. M. Cousin, by whose counsel it is probable that the plan was originally recommended, was, in the summer of 1831, commissioned to proceed to Germany; and his observations on the state of education in that country, transmitted from time to time to the Minister of Public Instruction, constitute the present Report. No one could certainly have been found better qualified to judge; no one from whom there was less cause to apprehend a partial judgment. A profound and original thinker, a lucid and eloquent writer, a scholar equally at home in ancient and in modern learning, a philosopher superior to all prejudices of age or country, party or profession, and whose lofty eclecticism, seeking truth under every form of opinion, traces its unity even through the most hostile systems;—M. Cousin was, from his universality both of thought and acquirement, the man in France able adequately to determine what a scheme of national education ought in theory to accomplish; and from his familiarity with German literature and philosophy, prepared to appreciate in all its bearings what the German national education actually performs. Without wavering in our admiration of M. Cousin's character and genius, we freely expressed on a former occasion our dissent from certain principles of his philosophy; and with the same sincerity, we now declare, that from the first page of his Report to the last, there is not a statement nor opinion of any moment in which we do not fully and cordially agree. This work, indeed, recommends itself as one of the most unbiassed wisdom. Once persecuted by the priests, M. Cousin now fear-

lessly encounters the derision of another party, as the advocate of religious education; nor does the memory of national calamity and of personal wrong withhold him from pronouncing the Prussian government to be the most enlightened in Europe. He makes no attempt to soothe the vanity of his countrymen at the expense of truth; and his work is, throughout, a disinterested sacrifice of self to the importance of its subject. His ingenuity never tempts him into unnecessary speculation; practice, already approved by its result, is alone anxiously proposed for imitation,—relative and gradual; and the strongest metaphysician of France traces the failure of the educational laws of his country to their metaphysical character. The Report is precisely what it ought to be,—a work of details; but of details so admirably arranged, that they converge naturally of themselves into general views; while the reflections by which they are accompanied, though never superficial, are of such transparent evidence as to command instant and absolute assent. This is, indeed, shown in the result. The Report was published. In defiance of national self-love and the strongest national antipathies, it carried conviction throughout France; a bill framed by its author for primary education, and founded on its conclusions, was almost immediately passed into a law; and M. Cousin himself, (now a peer of France,) appointed to watch over and direct its execution. Nor could the philosopher have been intrusted with a more congenial office; for, in the language of his own Plato,—“Man cannot propose a higher and holier object for his study, than education, and all that appertains to education.” And M. Cousin’s exertions, we are confident, will be crowned with the success and honour to which they are so well entitled. The benefit of his legislation cannot, indeed, be limited to France; a great example has there been set, which must be elsewhere followed; and other nations than his own will bless the philosopher for their intelligent existence. “*Juventutem recte formare*,” says Melancthon, “*paulo plus est quam expugnare Trojam*,” and to carry back the education of Prussia into France, affords a nobler (if a bloodless) triumph than the trophies of Austerlitz and Jena.

The Report of M. Cousin consists of two parts. The former, extending to about one-fourth of the volume, contains a cursory view of German education from the elementary schools up to the universities, as observed during a day’s stay at Frankfort, and a five days’ journey through the states of Saxony. The latter is

solely devoted to a detailed exposition of Prussian education, which the author enjoyed the most favourable opportunities of studying, in all its departments, during a month's residence at Berlin. This part is, however, not yet fully published. Of the four heads which M. Cousin promises to treat, (viz. 1. The general organization of public instruction; 2. The primary instruction; 3. Instruction of the second degree, or the gymnasia; 4. The higher instruction, or the universities,) the two first alone appear. We anxiously hope that nothing may occur to prevent the speedy publication of the last two. If we found fault, indeed, with the Report at all, it would be, not for what it contains, but for what it does not. We certainly regret that it was impossible for M. Cousin to extend his observations to some other countries of Germany. Bavaria would have afforded an edifying field of study; and the primary schools of Nassau are justly the theme of general admiration. In the present Article we must limit our consideration to the second Report; and taking advantage of M. Cousin's labours, and with his principal authorities before us, we shall endeavour to exhibit, in its more important features, a view of the organization of *Primary Instruction in Prussia*; reserving the higher and highest education—the Gymnasia and Universities—of Germany, for the subject of a future Article.

Before entering on the matter of primary education, it is necessary to premise an account of the general organization of Public Instruction in Prussia.—The Ministry of Public Instruction and Worship there forms a distinct department of administration. It is composed of a minister and a council divided into three sections,—for Worship,—for Education,—for Medicine; each consisting of a certain number of Councillors and a Director. Of the first, the councillors are principally ecclesiastics; and of the second, principally laymen. The mode in which the minister and his council govern all the branches of public instruction throughout the monarchy, is thus luminously explained by M. Cousin.

“ Prussia is divided into ten *Provinces*; viz., East Prussia, West Prussia, Posen, Pomerania, Brandenburg, Silesia, Saxony, Westphalia, Cleves, and the lower Rhine.

“ Each of these provinces is subdivided into *Departments* (*Regierungsbezirke*) comprehending a territory more or less extensive. Each of these departments is divided into *Circles*, (*Kreise*), less than our *arrondissements*, and larger than our cantons; and each of these circles is again subdivided into *Communes* (*Gemeinde*). Each department has a kind of council of pre-

lecture called the *Regency*, (*Regierung*), which has its *President*, nearly correspondent to our prefect, with this difference, that the president of a Prussian Regency has much less power over his council than our prefect over his; for, in Prussia, all affairs belong to the regency, and are determined by the majority of voices. As each department has its president, so every province has its *Supreme President* (*Oberpraesident*).

"All the degrees of public instruction are correlative to the different degrees of this administrative hierarchy. Almost every province has its university. East and West Prussia, with the Duchy of Posen, which are conterminous, have the University of Königsberg; Pomcrania, the University of Greifswald; Silesia, that of Breslau; Saxony, that of Halle; Brandenburg, that of Berlin; Westphalia, the imperfect University (called the Academy) of Münster; the Rhenish provinces that of Bonn. Each of these Universities has authorities appointed by itself, under the superintendence of a *Royal Commissioner*, named by the Minister of Public Instruction, with whom he directly corresponds; a functionary answering to the *Curator* of the older German Universities. This office is always intrusted to some person of consideration in the province: it is substantially an *honorary* appointment; but there is always attached to it a certain emolument, for it belongs to the spirit of the Prussian government to employ very few unpaid functionaries. It is of the nature of aristocratic governments to have many offices without salary, as is seen in England; but such a system is unsuitable to governments at once popular and monarchical, like Prussia and France; and were it carried to any length in either country, nothing less would ensue than a change in the form of the government. It would be in vain to expect that gratuitous duties would be performed by all the citizens adequate to their discharge; those of small fortunes would soon tire of them; they would gradually be confided to those of large fortunes, who, at last, would govern alone. In Prussia all functionaries are paid; and as no office is obtained till after rigid examinations, all are enlightened; and moreover, as they are taken from every class, they carry into the discharge of their duties the general spirit of the country, at the same time that they contract the habits of the government. Here is manifested the system of the Imperial government with us; it is that of every popular monarchy. A Royal Commissioner has duties which he is compelled to fulfil; whatever may be his consideration in other respects, in this he is a ministerial officer, accountable to the Minister. The Royal Commissioners are alone intermediate between the Universities and the Ministry. The Universities thus hold almost immediately of the Ministry. No provincial authority, civil or ecclesiastical, has the right of interfering in their affairs: they belong only to the state; this is their privilege and their guarantee. I will speak to you again in detail of their internal organization; it is enough, at present, to mark the relation which they hold to the central administration in the general economy.

"If the Universities belong exclusively to the state, the same is not the case with the schools of secondary instruction. In Prussia these are considered as in a great measure provincial. In every province of the monarchy, under the Supreme President of the province, there is an institution holding of the Ministry of Public Instruction, and in a certain sort representing it in

its internal organization; this institution is called the *Provincial Consistory* (*Provincial-Consistorium*). As the Ministry is divided into three sections, in like manner the Provincial Consistory: the first, for ecclesiastical affairs, or *Consistory* properly so called (*Consistorium*); the second, for public instruction, the *School Board* (*Schul-Collegium*); the third, for matters relative to public health, the *Medical Board* (*Medicinal-Collegium*). This Provincial Consistory is salaried: all the members are nominated by the Minister of Public Instruction and Worship; but at its head, and at the head of its sections, stands the Supreme President of the Province, to whom exclusively belongs the duty of correspondence, and who in this capacity corresponds with the Minister of Public Instruction, who is not, however, his natural minister; but in his quality of Supreme President, he corresponds with various ministers on matters relative to his province, although he himself holds directly of the Minister of the Interior. This official correspondence of the President of the province with the Minister of Public Instruction, is only formal, and for the sake of concentrating the provincial administration. In reality, all authority is in the hands of the Consistory, of which each section deliberates separately, and decides on all subjects by a majority of voices.—I shall here speak only of that section which is occupied with public education, viz. the *School-Board*.

"I must first call your attention to an essential difference between the character of the public instruction, in Prussia, and that which it presents in the other states of Germany through which I passed. In these, at the centre, under a director or a minister, stands a Consistory, in a great measure ecclesiastical; in Prussia, beside the minister, in place of a Consistory, there is a Council, divided into three parts, one of which only is clerical, whilst the other two are lay and scientific. This council has, therefore, no ecclesiastical character; the sacerdotal spirit is here replaced by the spirit of the government; the idea of the state predominant over all others. In like manner, in each province, if the composition of the Provincial Consistory be again too ecclesiastical, its separation into three sections, like the Ministry of Berlin, leaves to this body nothing clerical but the name. No doubt, the intimate relations of the *School-Board* with the *Consistory proper*, and its peculiar duties, render it essentially religious; but it is principally composed of lay members, and completely free in its action.

"Its special domain is secondary education, the Gymnasias, and those establishments intermediate between the schools of primary and secondary instruction, called *Progymnasias* and *Superior Burgher Schools*, (*Progymnasien, hoehere Buergerschulen*.) It is necessary to observe, that the seminaries for training teachers of the primary schools (*Seminarien fuer Schullehrer*), our primary normal schools, are likewise within its province, and that in general it interposes on all the higher questions touching primary education.

"Along with the School-Board, there is a *Commission of Examination*, (*wissenschaftliche Pruefungs-Commission*), usually composed of the professors of the university belonging to the province. This commission has two objects:—1. To examine the pupils of the gymnasias who are desirous of passing to the university, or to revise the *examen ad hoc*, which these young persons sometimes undergo at the gymnasium itself, (*Abiturienten-Examen*), by a review of the minutes and documents of this trial, (it corresponds to

our examination for Bachelor of Letters, without which no matriculation is competent in the Faculties ;) 2. To examine those who come forward as teachers in the gymnasia ; and here there are different examinations for the different gradations of instruction—one for masters of the lower classes, (*Lehrer*),—another for masters of the higher classes, (*Oberlehrer*),—a third, in fine, for rectors (correspondent to our provisors,) who are always intrusted with the more important instruction. The first examination for simple masters (*Lehrer*) is the fundamental. The Commission of Examination is the board that connects the secondary instruction with the higher, as the School-Board connects the public instruction in the provinces with the central ministry of Berlin.

“ The following is, in few words, the mechanism of the administration of popular education :—

“ If the universities belong exclusively to the state, and the schools of secondary instruction to the province, those of primary instruction pertain principally to the department and to the commune.

“ Every commune ought to have a school, even by the law of the state ; the pastor of the place is the natural inspector of this school, along with a communal committee of administration and superintendence, called *Schulvorstand*.

“ In urban communes, where there are several schools, and establishments for primary education of a higher pitch than the common country schools, the magistrates constitute, over the particular committees of the several schools, a superior committee, which superintends all these, and forms them into a harmonie system. This committee is named *Schuldeputation*, or *Schulcommission*.

“ There is, moreover, at the principal place of the circle (*Kreis*) another inspector, whose sphere comprehends all the schools of the circle, and who corresponds with the local inspectors and committees. This new inspector, whose jurisdiction is more extensive, is likewise almost always an ecclesiastic. Among the Catholics it is the dean. He has the title of *School Inspector of the Circle* (*Kreis-Schul-Inspector*.)

“ Thus the two first degrees of authority in the organization of primary instruction are, in Prussia as in the whole of Germany, ecclesiastical ; but with these degrees the influence wholly terminates, and the administrative commences. The inspector of each circle corresponds with the regency of each department, through its president. This regency, or council of department, has within it departmental-counsellors (*Regierungsrathe*) charged with different functions, and among others a special counsellor for the primary schools, styled *Schulrath* ; a functionary, salaried like all his colleagues, and who forms the link of the public instruction, with the ordinary departmental administration, inasmuch as, on the one side, he is nominated on the presentation of the Minister of Public Instruction, and as, on the other, immediately on his appointment, he forms, in his quality of *Schulrath*, part of the council of regency, and thereby comes into connexion with the Minister of the Interior. The *Schulrath* reports to the council, which decides by a majority. He thus inspects the schools, animates and maintains the zeal of the *Schulinspektoren*, of the *Schulvorstaende*, and of the schoolmasters ; the whole correspondence of the communal inspectors, and of the superior inspec-

tors, is addressed to him; and it is he who conducts all correspondence relative to the schools, in name of the regency and through the president, with the provincial consistories and the school-board, as well as with the Minister of Public Instruction: in a word, the *Schulrath* is the real director of primary education in each regency.

"I do not here descend into any detail; I am only desirous of making you aware of the general mechanism of public instruction in Prussia. In recapitulation:—Primary instruction is communal and departmental, and, at the same time, holds of the Minister of Public Instruction; a double character, derived, in my opinion, from the very nature of things, which requires equally the intervention of local authorities, and that of a higher hand, to vivify and animate the whole. This double character is represented in the *Schulrath*, who makes part of the Council of Department, and belongs at once to the Ministry of the Interior, and to that of Public Instruction. Viewed on another side, all secondary instruction is dependent on the School-Board, which makes part of the Provincial Consistory, and is nominated by the Minister of Public Instruction. All higher education, that of the universities, depends on the Royal Commissioner, who acts under the immediate authority of the minister. Nothing thus escapes the ministerial agency; and at the same time, every sphere of public instruction has in itself a sufficient liberty of operation. The universities elect their authorities. The School-Board proposes and superintends the professors of the gymnasia, and is informed on all the matters of any consequence regarding primary instruction, The *Schulrath*, with the Council of Regency, or rather the council of regency on the report of the *Schulrath*, and after considering the correspondence of the inspectors and the committees, decides the greater part of the affairs of the inferior instruction. The minister, without involving himself in the endless details of popular education, makes himself master of the results, directs the whole by instructions emanating from the centre, and extending to every quarter the national unity. He does not continually intermeddle with the concerns of secondary instruction; but nothing is done without his confirmation, and he proceeds always on accurate and complete reports. It is the same with the universities; they govern themselves, but according to the laws which they receive. The professors elect their Deans and their Rectors; but they themselves are appointed by the minister. In the last analysis, the aim of the whole organization of public instruction in Prussia is to leave details to the local authorities, and to reserve to the minister and his council the direction and impulsion of the whole."

The state of primary education in Prussia, M. Cousin exhibits under the two heads of the Law and its Results, *i. e.* :—

I. The organization of primary instruction, and the legislative enactments by which it is governed; and,

II. What these legislative enactments have accomplished, or the statistics of primary instruction.

We must limit our consideration to the former head alone; where M. Cousin gives in his own arrangement that portion of the law of 1819—the educational digest of Prussia—which relates

to the primary instruction. We shall endeavour to afford a somewhat detailed view of this important section of the Report. The more interesting provisions of the law we shall give at large; the others abbreviate or omit.

I.—*Duty of Parents to send their Children to School,*
(Schulpflichtigkeit.)

In Prussia, as in the other states of Germany, this duty has been long enforced by law. The only title of exemption is the proof that a competent education is furnished to the child in private. The obligation commences at the end of the fifth, (though not strictly enforced till the beginning of the seventh,) and terminates at the conclusion of the fourteenth year. None are admitted or dismissed from school before these ages, unless on examination, and by special permission of the committee of superintendence. During this interval, no child can remain away from school unless for sufficient reasons, and by permission of the civil and ecclesiastical authority; and a regular census, at Easter and Michaelmas, is taken by the committees and municipal authorities, of all the children competent to school. Parents, tutors, and masters of apprentices, are bound to see that due attendance is given by the children under their care; and the schoolmasters must, in a prescribed form, keep lists of attendance, to be delivered every fortnight to the committees of superintendence. Not wholly to deprive parents, &c., of the labours of their children, the school hours are so arranged that a certain time each day is left free for their employment at home. Do parents, &c., neglect their responsibility in sending their children punctually to school?—counsel, remonstrance, punishments, always rising in severity, are applied; and if every means be ineffectual, a special tutor or co-tutor is assigned to watch over the education of the children. Jewish parents who thus offend, are deprived of their civil privileges. To the same end, the clergy, Protestant and Catholic, are enjoined to use their influence, to the extent and in the manner they may judge expedient; their sermons, on the opening of the schools, ought to inculcate the duty of parents to afford their children education, and to watch over their regular attendance, and may even contain allusion to the most flagrant examples of these obligations neglected; and they shall not admit any child to the conferences previous to confirmation and communion, without production of the certificates of education.

In the case of necessitous parents, means are to be taken to enable them to send their children to school, by supplying them with clothing, books, and other materials of instruction.

II.—*Duty of each Commune (Gemeinde*) to maintain at its expense, a Primary School.*

Every commune, however small, must maintain an *elementary school*, complete or incomplete; that is to say, either fulfilling the whole complement of instruction prescribed by law, or its most essential parts. Every town must support *burgher schools*, one or more, according to its population. Petty towns of less than fifteen hundred inhabitants, and inadequate to the expense of a burgher school, are bound to have at least complete elementary schools. In case a town cannot maintain separately, and in different tenements, an elementary and a burgher school, it is permitted to employ the lower classes of the burgher as an elementary school; in like manner, but only in case of manifest necessity, it is allowed to use, as a burgher school, the lower classes of the gymnasim. In towns, the Jews may establish schools at their own expense, if organized, superintended, and administered by them in conformity to the legal provisions; they are likewise permitted to send their children to the Christian schools, but can have no share in their administration.†

The first concern is to provide the elementary schools required in the country. When possible, incomplete schools are every where to be changed into complete; and this is imperative where two masters are required. To this end, the inhabitants of every rural commune are, under the direction of the public authorities, constituted into a *Country-school-union (Landschulverein)*. This union is composed of all landed proprietors with or without children, and of all fathers of families domiciled within the territory of the commune, with or without local property. Every

* *Gemeinde, commune*, may, with some inaccuracy, be translated *parish*.

† From the statistical information subsequently given by our author, it appears that, in 1825, Prussia contained of *inhabitants* 12,256,725;—of public *elementary* schools for both sexes, 20,887;—of public *burgher* or *middle* schools for *boys*, 458; for *girls*, 278; in all, 21,623 schools for *primary education*. In these were employed 22,261 *masters*; 704 *mistresses*; and 2,024 *under masters* and *under mistresses*: *primary teachers*, in all 25,000;—affording public primary instruction to 871,246 *boys*, 792,972 *girls*; in all, to 1,664,218 *children*. Since that, the improvement has been rapid.

village, with the adjacent farms, should have its school-union and its school; but in exception to this rule, but only as a temporary arrangement, two or more villages may unite: if, firstly, one commune be too poor to provide a school; if, secondly, none of the associated villages be distant from the common school more than two (English) miles in champaign, and one mile in hilly districts: if, thirdly, there be no intervening swamps or rivers at any season difficult of passage; and, fourthly, if the whole children do not exceed a hundred. If a village, by reason of population or difference of religion, has already two schools for which it can provide, these are not to be united; especially if they belong to different persuasions. Circumstances permitting, separate schools are to be encouraged. Mere difference of religion should form no obstacle to the formation of a school union; but, in forming such an association of Catholics and Protestants, regard must be had to the numerical proportion of the inhabitants of each persuasion. The principal master should profess the faith of the majority, the subordinate master that of the minority.* Jews enjoy the advantages, but are not permitted to interfere in the administration of these schools. If, in certain situations, the junction of schools belonging to different persuasions be found expedient, this must take place by consent of the two parties. Care must, however, be taken, in case of junction, that each sect has the means necessary for the religious education of its scholars. That neither party may have cause of anxiety, and that whatever it contributes to the partnership may be secured in case of separation, the respective rights

* This liberality is general throughout Germany. If we are ever to enjoy the blessings of a national education in the United Kingdom, the same principle must be universally applied. An established church becomes a nuisance, when (as hitherto in England and Ireland) it interposes an obstacle to the universal diffusion of religion and intelligence. We trust that the boon conceded by our late monarch to his German dominions, may be extended, under his successor, to the British Empire. By ordinance of George IV. dated Carlton House, 25th June 1822, in reference to education in the county of Lingen, it is decreed, (although the Protestant be the established religion,) that in all places where the majority of the inhabitants are Catholic, the principal schoolmaster shall be of their persuasion. The Lutheran schools to be under inspection of the Superintendent; the Catholic under that of the Archpriest:—both bound to visit the schools regularly, to examine schoolmaster and scholar, and to report to their respective consistories. (Weingart's Journal, 1822. Heft. 4. p. 21.)

of the parties shall be articulately set forth, and ratified in a legal document.

The law having ordained the universal establishment of primary schools, goes on to provide for their support. This support consists in securing: 1. A suitable salary for the schoolmasters and schoolmistresses, and a retiring allowance when unable to discharge their functions; 2. A schoolhouse, with appurtenances, well laid out, maintained in good order, and properly heated; 3. The furniture, books, pictures, instruments, and means requisite for instruction and exercise; 4. The aid to be given to needy scholars.—The *first* provision is solemnly recognised as of all the most important. The local authorities are enjoined to raise the schoolmaster's salary as high as possible. Though a general rule rating the amount of emolument necessarily accruing to the office cannot be established for the whole monarchy, a minimum, relative to the prosperity of each province, is to be fixed, and from time to time reviewed, by the provincial consistories.—In regard to the *second*,—schoolhouses are to be in a healthy situation, of sufficient size, well aired, &c.; hereafter, all to be built and repaired in conformity to general models. Attached, must be a garden of suitable size, &c., and applicable to the instruction of the pupils; and, where possible, before the schoolhouse, a gravelled play-ground, and place for gymnastic exercises.—The *third* provision comprises a complement of books for the use of master and scholar; according to the degree of the school, a collection of maps, and geographical instruments, models for drawing and writing, music, &c., instruments and collections for natural history and mathematics, the apparatus for gymnastic exercises, and, where this is taught, the tools and machines requisite for technological instruction.—In regard to the *fourth*, if there be no charity-school specially provided, every public school is bound to afford to the poor instruction, wholly or in part gratuitous; as likewise the books and other necessities of education.

But, as considerable funds are required for the maintenance of a school established on such extensive bases, it is necessary to employ all the means which place and circumstances afford. We cannot attempt to follow M. Cousin through this part of the law, however important and wisely calculated are its regulations. We shall state only in general, that it is recognised as a principle, that as the gymnasias and other establishments of public education of

the same rank, are principally supported at the cost of the general funds of the state or province; so the inferior schools are primarily, and, as far as possible, solely, maintained at the expense of the towns, and of the country-school unions. The support of these schools is of the highest civil obligation. In the towns it can be postponed to no other communal want; and in the country all landholders, tenants, fathers of families, must contribute in proportion to the rent of their property within the territory of the school-union, or to the produce of their industry; this either in money or kind. Over and above these general contributions, fees also (*Schulgeld*), regulated by the departmental authorities, are paid by the scholars, but not levied by the schoolmaster; unless under particular circumstances it be deemed expedient to commute this special payment into an augmentation of the general contribution.

III.—*General Objects and different Degrees of Primary Education.*

Two degrees of primary instruction are distinguished by the law; the *Elementary schools* and the *Burgher schools*. The elementary schools (*Elementarschulen*) propose the development of the human faculties, through an instruction in those common branches of knowledge which are indispensable to the lower orders, both of town and country. The burgher schools (*Buergerschulen, Stadtschulen*)* carry on the child till he is capable of manifesting his inclination for a classical education, or for this or that particular profession. The gymnasia continue this education until the youth is prepared, either to commence his practical studies in common life, or his higher and special scientific studies in the university.

These different gradations coincide in forming, so to speak, a great establishment of national education, one in system, and of which the parts, though each accomplishing a special end, are all mutually correlative. The primary education of which we speak, though divided into two degrees, has its peculiar unity and general laws; it admits of accommodation, however, to the sex, language, religion, and future destination of the pupils. 1. Separate establishments for girls should be formed, wherever possible, corre-

* Called likewise *Mittelschulen*, middle schools, and *Realschulen*, real schools; the last, because they are less occupied with the study of languages (*Verbalia*) than with the knowledge of things (*Realia*).

sponding to the elementary and larger schools for boys. 2. In those provinces of the monarchy (as the Polish) where a foreign language is spoken, besides lessons in the native idiom, the children shall receive complete instruction in German, which is also to be employed as the ordinary language of the school. 3. Difference of religion in Christian schools necessarily determines differences in religious instruction. This instruction shall always be accommodated to the spirit and doctrines of the persuasion to which the school belongs. But, as in every school of a Christian state, the dominant spirit (common to all creeds) should be piety, and a profound reverence of the Deity, every Christian school may receive the children of every sect. The masters and superintendents ought to avoid, with scrupulous care, every shadow of religious constraint or annoyance. No school should be abused to any purposes of proselytism; and the children of a worship different from that of the school, shall not be obliged, contrary to the wish of their parents or their own, to attend its religious instruction and exercises. Special masters of their own persuasion shall have the care of their religious education; and, should it be impossible to have as many masters as confessions, the parents should endeavour, with so much the greater solicitude, to discharge this duty themselves, if disinclined to allow their children to attend the religious lessons of the school. Christian schools may admit Jewish children, but not Jewish schools Christian children. The primitive destination of every school, says the law, is to train youth, that, with a knowledge of the relations of man to God, it may foster in them the desire of ruling their life by the spirit and principles of Christianity. The school shall, therefore, betimes second and complete the first domestic training of the child to piety. Prayer and edifying reflections shall commence and terminate the day; and the master must beware that this moral exercise do never degenerate into a matter of routine. He must also see that the children are constant in their attendance on divine service—(with other regulations to a similar effect.) Obedience to the laws, loyalty, and patriotism, to be inculcated. No humiliating or indecent castigation allowed; and corporal punishment, in general, to be applied only in cases of necessity. Scholars found wholly incorrigible, in order to obviate bad example, to be at length dismissed. The pupils as they advance in age, to be employed in the maintenance of good order in the school, and thus betimes

habituated to regard themselves as active and useful members of society.

The primary education has for its scope the development of the different faculties, intellectual and moral, mental and bodily. Every *complete Elementary school* necessarily embraces the nine following branches :—1. Religion,—morality, established on the positive truths of Christianity ;—2. The German tongue, and in the Polish provinces, the vernacular language ;—3. The elements of geometry and general principles of drawing ; 4. Calculation and applied arithmetic ;—5. The elements of physics, of general history, and of the history of Prussia ;—6. Singing ;—7. Writing ;—8. Gymnastic exercises ;—9. The more simple manual labours, and some instruction in the relative country occupations.—Every *Burgher school* must teach the ten following branches :—1. Religion and morals. 2. The German language, and the vernacular idiom of the province, reading, composition, exercises of style, exercises of talent, and the study of the national classics. In the countries of the German tongue, the modern foreign languages are the objects of an accessory study. 3. Latin to a certain extent.* 4. The elements of mathematics, and in particular a thorough knowledge of practical arithmetic. 5. Physics, and natural history to explain the more important phenomena of nature. 6. Geography, and general history combined ; Prussia, its history, laws, and constitution, form the object of a particular study. 7. The principles of design ; to be taught with the instruction given in physics, natural history, and geometry. 8. The penmanship should be watched, and the hand exercised to write with neatness and ease. 9. Singing, in order to develop the voice, to afford a knowledge of the art, and to enable the scholars to assist in the solemnities of the church. 10. Gymnastic exercises accommodated to the age and strength of the scholar.—Such is the minimum of education to be afforded by a burgher school. If its means enable it to attempt a higher instruction, so as to prepare the scholar, destined to a learned profession, for an immediate entrance into the gymnasium, the school then takes the name of *Higher Town School*, or *Progymnasium* (*hoehere Stadtschule, Progymnasium.*) †

* This, we believe, is not universally enforced.

† We prefer in this, and some other respects, the order of the Bavarian schools. The boy is there prepared for the *Gymnasium*, which he enters at fourteen, in the "*Latin School*," which he enters at eleven. This is an esta-

Every pupil, on leaving school, should receive from his masters and the committee of superintendence, a certificate of his capacity, and of his moral and religious dispositions. These certificates to be always produced on approaching the communion, and on entering into apprenticeship or service. They are given only at the period of departure, and in the burgher schools, as in the gymnasia, they form the occasion of a great solemnity.

Every half-year pupils are admitted; promoted from class to class; and absolved at the conclusion of their studies.

A special order will determine the number of lessons to be given daily and weekly upon each subject, and in every degree. No particular books are specified for the different branches in the primary schools; they are left free to adopt the best as they appear. For religious instruction in the Protestant schools, the Bible and Catechisms. The younger scholars to have the Gospels and New Testament; the older the whole Scriptures. Books of study to be carefully chosen by the committees, with concurrence of the superior authorities, the ecclesiastical being specially consulted in regard to those of a religious nature. For the Catholic schools, the Bishops, in concert with the provincial consistories, to select the devotional books; and in case of any difference of opinion, the Minister of Public Instruction shall decide.

Schoolmasters are to adopt the methods best accommodated to the natural development of the human mind;—methods which keep the intellectual powers in constant, general, and spontaneous exercise, and are not limited to the infusion of a mechanical knowledge.* The committees are to watch over the methods

blishment distinct from the burgher school. Of the history of education in Bavaria, we may, perhaps, take an opportunity of speaking.

* The Bavarian *Lehrplan fuer die Volksschulen* is excellent on this point; and so, indeed, are all the German writers on education. The prevalent ignorance in our own country, even of the one fundamental principle of instruction—"that every scholar must be his own teacher, or he will learn nothing;" in other words, that the *development* is precisely in proportion to the *exertion* of the faculty,—has been signally exposed, both through example and precept, by our townsman, Mr Wood;—a gentleman whose generous and enlightened devotion to the improvement of education entitles him to the warmest gratitude of his country. We have the high authority of Professor Pillans for stating, that in the parochial schools of Scotland, "the principle, *That a child, in being taught to read should be taught at the same time to understand what he reads*, is so far from being generally received, that the *very opposite*, if not openly avowed, is at least *invariably* acted on!" It cannot, we trust, be now long before the Scottish schoolmaster be sent him-

of the master, and to aid him by their counsel; never to tolerate a vicious method, and to report to the higher authorities should their admonitions be neglected. Parents and guardians have a right to scrutinize the system of education by which their children are taught; and to address their complaints to the higher authorities, who are bound to have them carefully investigated. On the other hand, they are bound to co-operate with their private influence in aid of the public discipline: nor is it permitted that they should withdraw a scholar from any branch of education taught in the school as necessary.

As a national establishment, every school should court the greatest publicity. In those for boys, besides the special half-yearly examinations, for the promotion from one class to another, there shall annually take place public examinations, in order to exhibit the spirit of the instruction, and the proficiency of the scholars. On this solemnity, the director, or one of the masters, in an official program, is to render an account of the condition and progress of the school. In fine, from time to time, there shall be published a general report of the state of education in each province. In schools for females, the examinations to take place in presence of the parents and masters, without any general invitation.

But if the public instructors are bound to a faithful performance of their duties, they have a right, in return, to the gratitude and respect due to the zealous labourer in the sacred work of education. The school is entitled to claim universal countenance and aid, even from those who do not confide to it their children. All public authorities, each in its sphere, are enjoined to promote the public schools, and to lend support to the masters in the exercise of their office, as to any other functionaries of the state. In all the communes of the monarchy, the clergy of all Christian persuasions, whether in the church, in their school visitations, or in their sermons on the opening of the classes, shall omit no opportunity of recalling to the schools their high mission, and to the people their duties to these establishments. The civil authorities, the clergy, and the masters, shall everywhere co-operate in

self to school. Scotland is, however, as far superior to England in her popular education, as inferior to Germany. And, considering in what a barbarous manner our schoolmasters are educated, examined, appointed, paid, and superintended, they have accomplished far more than could reasonably have been expected.

tightening the bonds of respect and attachment between the people and the school; so that the nation may be more and more habituated to consider education as a primary condition of civil existence, and daily to take a deeper interest in its advancement.

IV.—*On the Training—Appointment—Promotion—Punishment of Primary Instructors.*

The best plans of education can only be carried into effect by good teachers; and the state has done nothing for the instruction of the people, unless it take care that the schoolmasters have been well prepared, are encouraged and guided in their duty of self-improvement, and finally promoted and recompensed according to their progress, or punished in proportion to their faults. To fulfil his duties, a schoolmaster should be pious and wise, impressed with the importance of his high and holy calling, well acquainted with its duties, and possessing the art of teaching and directing the young,—&c.

Their Training.—To provide the schools gradually with such masters, their education must not be abandoned to chance; it is necessary to continue establishing, in sufficient numbers, *Seminaries for primary instructors (Schullehrer-Seminarien)*.^{*} The cost of these establishments is to be borne in part by the public treasury of the state, in part by the departmental school exchequers. Every department should possess such a seminary, annually turning out a complement of young men, prepared and approved competent to their destination, (*Candidaten*), equal in number to the average annual loss of schoolmasters in the department.† The following regulations are to be attended to in these establishments.

1. No seminary for primary instructors to admit more than from sixty to seventy alumni (*Praeparanden*.)
2. In departments where Protestants and Catholics are nearly

^{*} In Austria, where the name, we believe, was first applied, and in France, such establishments are termed *Normal Schools*. This expression, however, is ambiguous; it, indeed, properly denotes the *pattern school (Musterschule)*, to which a seminary for schoolmasters is usually, but not necessarily, attached.

† This in 1819. At present there is not a department of the Prussian monarchy without its great primary seminary, and frequently, over and above, several smaller subsidiary institutions of the same kind. Of the *Great Primary Seminaries*, there existed in 1806, only *fourteen*; in 1826, *twenty-eight*, i. e. one for each department; in 1831, *thirty-four*.

equal, and where funds and other circumstances permit, there shall be established a seminary of this kind, for each religion. But where there is a great preponderance of either, the schools of the less numerous persuasion shall be provided with masters from a seminary of the same creed, in some neighbouring department, or from a small establishment of the kind annexed to a simple primary school. Seminaries common to Protestants and Catholics are sanctioned, provided the *élèves* receive religious instruction in conformity to their belief.

3. These seminaries are to be established, as far as possible, in towns of a middling size:—not in large, to remove the young men from the seductions of a great city;—not in small, to allow them to profit by the vicinity of schools of different degrees.

4. To enable them to recruit their numbers with the most likely subjects, and to educate these themselves, they shall, as frequently as possible, be in connexion with orphan hospitals and charity schools,—&c. &c.

5. It is not necessary to have two kinds of seminaries for primary instructors,—&c. &c.

6. The studies of the primary seminaries are not the same as the studies of the primary schools themselves. Admission into the seminary supposes a complete course of primary instruction, and the main scope of the institution is to add, to the knowledge previously acquired, accurate and comprehensive notions of the art of teaching, and of the education of children, in general and in detail, in theory and in practice.* But as it may not always be possible to obtain subjects fully prepared, it is permitted to receive, as seminarists, those who are not yet perfect in the higher departments of their previous studies. The age of admission is from sixteen to eighteen.

7. The principal aim of the primary seminaries is to form their

* We may here state, that the branches of instruction, in the Prussian primary seminaries, are in general:—1. Religion; Biblical history, study of the Bible, an Introduction to the sacred books, Christian doctrine and morals.—2. German language etymologically considered, grammar, the communication of thought in speech and writing.—3. Mathematics; mental arithmetic, ciphering, geometry.—4. History.—5. Geography and geology.—6. Natural history, physics.—7. Music; singing, theory of music, general bass, execution on the violin and organ.—8. Drawing.—9. Penmanship.—10. Pædagogic and didactic (*i. e.* art of moral education, and art of intellectual instruction) theory to be constantly conjoined with practice.—11. Church service.—12. Elements of horticulture.—13. Gymnastic exercises.

pupils to health of body and mind ; to inspire them with religious sentiment, and the kindred pædagogical spirit. The instruction and exercises in the seminary to be coextensive with the branches of education in the primary schools. In regard to methods, it should be less attempted to communicate theories, than, by enlightened observation and personal experience, to lead the pupil to clear and simple principles ; and to this end, schools should be attached to all the seminaries, in which the alumni may be exercised to practice.

8. The course of preparation to last three years. The first in supplement of the previous primary education ; the second devoted to special instruction of a higher order ; and the third to practical exercises in the annexed primary school, and other establishments of the place. For those who require no supplementary instruction, a course of two years may suffice.

9. Small stipends allowed to a certain number of poor and promising seminarists.

10. All who receive such a gratuity, are obliged, at the end of their course, to accept any vacancy to which they may be nominated by the provincial consistories—with the prospect of a more lucrative appointment if their conduct merit promotion.

11. The regulations of every seminary to be ratified by the minister of public instruction ; immediate superintendence to be exercised by the provincial consistories, and, in respect to the religious instruction of the several seminaries, by the clerical authorities.

But the preparation of primary schoolmasters is not exclusively limited to such seminaries. Large primary schools, clergymen, and able schoolmasters, may, at the discretion of the provincial consistories, be allowed to attempt this ; their pupils, if deficient, to be sent to a seminary to complete their qualification. The superintendence of these petty establishments may be confided to the inspectors of the circle. When joined to a girls' school, these minor establishments may educate school-mistresses.

Their appointment.—Every man, foreigner or native, of mature age, irreproachable in his moral and religious character, and approved, by examination, competent to its duties, is eligible to the office of public instructor. But this appointment belongs, by preference, to the seminarists, who, after a full course of preparation, have been regularly examined, and found duly

qualified in the theory and practice of all the various branches of primary instruction. These (half-yearly and annual) examinations are conducted by a commission of four competent individuals; two of its members being lay, two clerical. The clerical members, for the examination of Protestant instructors, are appointed by the ecclesiastical authorities of the province; those for Catholic, by the bishop of the diocese. The lay members are nominated by the provincial consistory. These appointments are not for life, but renewable every three years. Religion, and the other branches, form the subject of two separate examinations. For Catholic teachers, the religious examination takes place under the presidency of a church dignitary delegated by the bishop; for Protestant, under the presidency of a clergyman. The examinations on temporal matters are conducted under the presidency of a lay counsellor of the provincial consistory. Both parts of the examination, though distinct, are viewed as constituting but a single whole; all the members of the commission are always present, and the result, if favourable, is expressed in the same certificate. This certificate, besides the moral character of the candidate, states the comparative degree of his qualification,—*eminently capable, sufficiently capable, just capable*; and also specifies his adaptation to the higher or the lower department of primary instruction. Those found incompetent, are either declared wholly incapable, or are remitted to their studies. The others, with indication of the degree of their certificate, are placed on the list of candidates of each department, and have a claim to be appointed; but to accelerate this, the names of those worthy of choice are published twice a-year in the official papers of the departments, where the order of their classification is that of their certificates. Schoolmistresses, also, are approved competent through examinations regulated by the provincial consistories.

Incentives to Improvement—Promotion.—It is the duty of the clergy and of the enlightened men to whom the superintendence and inspection of schools are confided, to watch over the progressive improvement of the masters. In particular, it is incumbent on the directors and rectors of gymnasia and town-schools to take an active interest in the younger masters, to afford them advice, to point out their errors, and to stimulate them to improve themselves by attending the lessons of more experienced teachers, by cultivating their society, by forming

school conferences or other associations of instructors, and by studying the best works on education. The provincial consistories, in electing able and zealous masters of the popular schools, should engage them to organize extensive associations among the schoolmasters of town and country, in order to foster the spirit of their calling, and to promote their improvement by regular meetings, by consultations, conversations, practical experiments, written essays, the study of particular branches of instruction, reading in common well-chosen works, and by the discussions to which these give rise. The directors of such associations merit encouragement and support, in proportion to their application and success. By degrees, every circle to have a society of schoolmasters.* Distinguished masters, and those destined to the direction of primary seminaries, should likewise, with the approbation, or on the suggestion of the minister, be enabled, at the public expence, to travel in the interior of the country or abroad, in order to obtain information touching the organization, and wants of the primary schools.† Zeal and ability in the master to be rewarded by promotion to situations of a higher order, and even, in particular cases, by extraordinary recompenses. The provincial consistories to prepare tables of the different places of schoolmasters, classed according to their emolument; and to take care that the promotion be in general made in conformity to these lists. No term of service affords of itself a valid claim to promotion; when a place is soli-

* These associations, among other institutions, are at once cause and effect of the pedagogical spirit prevalent throughout the empire,—a spirit which, unfortunately, has no parallel in any other country. How large a share of active intellect is, in Germany, occupied with education, may be estimated from the number of works on that science which annually appear. Pædogy forms one of the most extensive departments of German literature. Taking the last three years, we find, from Thon's catalogues, that, in 1830, there were published 501—in 1831, 452—in 1832, 526 new works of this class. Of these, twenty were journals, maintained exclusively by their natural circulation. Does Britain, or France, *thus* support even one?

† This regulation has proved of the highest advantage. But the Prussian government has done much more. Not only have intelligent schoolmasters been sent abroad to study the institutions of other countries, as those of Graser, Poehlman, Pestalozzi, Fellenberg, &c., but almost every foreign educational method of any celebrity has been fully and fairly tried by experiment at home. In this way the Prussian public education has been always up to every improvement of the age, and obviated any tendency to a partial and one-sided development.

cited superior to that for which the petitioner has received a certificate, an examination of promotion must take place before the same authorities, to whom the examination for appointment is intrusted. Where the competency is notorious, examination may, by the ratifying power, be dispensed with. The departmental authority must, at the end of each year, transmit to the ministry a list of all masters newly placed or promoted, with a statement of the value of the several appointments; and this authority is never excusable if it leave personal merit without employment and recompense, or the smallest service unacknowledged. (The regulations touching the degradation and dismissal of incapable, negligent, immoral masters, we must wholly omit.)

V.—*Of the Direction of the Schools of Primary Instruction.*

Such is the internal organization of the primary education. But this organization would not work of itself; it requires an external force and intelligence to impel at once and guide it—in other words, a governing power. The fundamental principle of this government is, that the ancient union of popular instruction with Christianity and the Church should be maintained; always, however, under the supreme direction of the ministerial authority.

Communal Authorities.—General rule.—That as each commune, urban or rural, has its primary school or schools, so it must have its special *Superintending School Committee*, (*Schulvorstand*.)

Primary Country Schools.—Where the church contributes to their support, this committee is composed of the patron and clergyman of the parish, of the magistrates of the commune, and of several fathers of families, members of the school-union; and where all are not of one faith, the proportion of the sects among the members of the union must be represented by the proportion of the sects among the fathers of families in the committee. The fixed members of the committee form its *Committee of Administration* (*verwaltende Schulvorstand*); the others are elected (for four years, and capable of re-election) by the school-union, and confirmed by the provincial consistory. No one allowed to decline this duty, unless burdened with another communal office. In schools exclusively endowed by the church, the committee of administration may be wholly ecclesiastical. However constituted, this committee takes cognizance of all that concerns the school, within and without. The pastor, in particular, who is the natural inspector of the village school, ought to be frequent in his

visits, and unremitted in his superintendence of the masters. The committees receive all complaints, which they transmit to the superior authorities. Their exertions should be especially directed to see that all is conformable to regulation; to animate, direct, and counsel the instructors; and to excite the zeal of the inhabitants for education. Articulate directions on the more special duties of the administrative committees, and accommodated to their several circumstances, to be published by the provincial consistories. Services gratuitous.

Primary Town Schools.—In *petty* towns, where there is only a single school, the committees of administration are composed, as those of the country; only, if there be two or more clergymen, it is the first who regularly belongs to this committee; to which is also added one of the magistrates, and a representative of the citizens.

In towns of a *middling* size, which support several primary schools, there is to be formed, in like manner, a single common administration (*Ortschulbehoerde*), except only, that to this council is added a father of a family of each school, and a clergyman of each sect, if the schools be of different creeds. It will form matter of consideration whether a person specially skilled in scholastic affairs (*Schulmann*) should be introduced.

Large towns are to be divided into districts, each having its superintending school-committee. There shall, however, be a central point of superintendence for all the schools, gymnasias excepted; this called the *School-commission*, (*Schulcommission*.) This properly composed of the Lutheran Superintendent, and of the Catholic Arch-priest or Dean of the place, and according to the size of the town and number of its schools, of one or more members of the magistracy, of an equal number of representatives of the citizens, and of one or two individuals versed in the science of education. A member of each committee of administration (if special circumstances do not prevent) is added, unless one be already there, in a different capacity. These bodies to be confirmed by the provincial consistories, who must take care that only upright, intelligent, and zealous individuals are admitted. The members elected for six years, with capacity of re-election; no one, however, obliged to serve longer than three. Municipal functions alone afford a plea of excuse. Services unpaid. The school-commission is bound—to see that the town be provided with the necessary schools—to attend to their

wants—to administer the general school-fund—to take care that the regulations prescribed by the law, the minister, or the provincial consistories, are duly executed, in regard to school attendance by the children of rich and poor—to do every thing for the internal and external prosperity of the schools, &c. &c. &c. The district committees have each the superintendence of their schools, in subordination to the school-commission. The school-commission and district-committees to meet in ordinary once a-month. Their presidents elected for three years by the members, and confirmed by the consistory of the province. Decisions, by plurality of voices; except in matters touching the internal economy of the school, which are determined by the opinion of the clergymen, and those specially versed in educational matters. The committees may call in to assist in their extraordinary general deliberations, the clergy and instructors of the district, or a part of them. The school-commissions annually address circumstantial reports on the schools under their inspection to the provincial consistories; in the petty towns, and country communes, this report is made through the inspectors of the circle.

Authorities of the Circle.—There is a general superintendence over the inferior schools of a circle, as likewise over the committees of administration of these schools, and this superintendence is exercised by the *Inspector of the Circle*, (*Schul-Kreis-Aufsicher*, or *Schul-Kreis-Inspektor*). The school circle is co-extensive with the diocese of the Protestant Superintendent and Catholic Bishop. But if the diocese be too large for one school-inspection, it must be divided into two circles. For Protestant schools, the superintendents are in general the inspectors of the circle. The greatest care is therefore to be taken that no churchman be nominated superintendent, who does not, besides his merely clerical acquirements, possess those qualifications necessary for the inspection of schools. Clergymen, not superintendents, may, in certain specified circumstances, be appointed inspectors; and even laymen, distinguished for their pædagogical knowledge and activity; always, however, with permission previously obtained from the Minister of Public Instruction. For the Catholic schools, the inspectors are in general the Deans. Under the same conditions as for the Protestant schools, other ecclesiastics and even laymen permitted to replace the Deans. The Protestant inspectors are nominated by the consistory of the province, and confirmed by the Minister of Public Instruction. The Catholic inspectors

are proposed by the Bishops, and presented, with an articulate statement of their qualifications, by the provincial consistories, to the Minister for confirmation. The Minister has a right to decline the confirmation, when well-founded objections can be alleged against the presentee, and to summon the Bishop to make a new proposal. The inspector of the circle is charged with watching over the internal management of schools, the proceedings of the committees, and the conduct of the instructors. The whole scholastic system, indeed, is subjected to their revision and superior direction. They must make themselves fully acquainted with the state of all the schools, by means of the half-yearly reports transmitted by the communal committees, by attending the examinations, by unexpected visits as frequently as may be, and by the solemn revisions to be made once a-year by every inspector in all the schools under his jurisdiction. In these revisions, he examines the children assembled together: requires an account of the school administration, internal and external, from the administrative committee; receives the complaints and wishes of the members of the school-union, and takes measures to remedy defects. He transmits a full report of the revision to the consistory of the province. The consistory from time to time name counsellors from its body to assist at the stated, or to make extraordinary, revisions.

For the external management of country-schools, the inspectors should act in concert with the counsellors of the circle, (*Land-raethe*.) All the regulations and enquiries of the provincial consistories, relative to the internal affairs of the schools, are addressed to the inspectors, as on the other hand, the internal wants of the schools, and of their masters, are brought by the inspectors to the knowledge of the consistories. The Catholic inspectors are bound to furnish to the Bishop the information required touching the religious concerns of the schools; but their primary duty is to inform the provincial consistories of their general condition. On the other hand, they should communicate to the Bishop the report of the annual revision, addressed to the consistories. The Protestant inspectors, as clergyman, are already in connexion with the Synods; but they, as well as the clerical members of the committees of administration, ought to inform the synods of the state of the schools, and take counsel in the synodal meetings in regard to their improvement. Lay inspectors should do this by writing. Each inspector receives an annual indemnity for the travelling

expenses he may incur in the discharge of his duties, the amount to be rated by the provincial consistories. The study of the theory and practice of education is made imperative at the University, both on Protestant and Catholic students of theology; and no one shall be allowed to pass the examination for holy orders, unless found conversant with all matters requisite for the administration and superintendence of schools. The law of 1819 stops with the inspector of the circle. But it should be remembered, that over the inspector stands the school-counsellor, (*Schulrath*;) a functionary belonging to the departmental council of regency, and yet nominated by the Minister of Public Instruction. The regency represented by the school-counsellor, is not to be confounded with the consistory of the province, of which the school-board (*Schulcollegium*) forms part. This high scholastic authority, provincial, not departmental, intermeddles with primary instruction only in certain more important points; for example, the seminaries for primary schoolmasters, lying, as they do, beyond the sphere of the regency, of the school-counsellor, and of the inspector of the circle. Of these we have already spoken, (*supra*, pp. 569, 571.)

VI.—Of Private Schools.

In Prussia all education, but especially the education of the people, rests on the public establishments; the intelligence of the nation was too important a concern to be abandoned to chance; but though no dependence is placed by the state on private schools, these institutions are not proscribed, but authorized under the conditions necessary to obviate all serious detriment to the cause of education. We cannot enter into any detail on this head. Suffice it to say, that while the state on the one hand, through the high qualification it secures in those to whom it confides the care of public instruction, raises the general standard of pedagogical competency to a very lofty pitch; on the other, it takes measures directly to abate the nuisance, so prevalent among ourselves, of unqualified interlopers in this difficult and all-important occupation. In Prussia, quacks are tolerated neither in medicine nor in education. Private instructors must produce satisfactory evidence of their moral and religious character; their capacity is ascertained by examination; and the license which they obtain, specifies what, and in what degree, they are found

qualified to teach. Neither are private establishments of education emancipated from public inspection.

We must subjoin M. Cousin's observations on this Law, and on the expediency of its adoption. They are of high importance; and from their application to the circumstances of our own country, are hardly less deserving of consideration in England than in France.

"The points of which I have now treated comprehend the whole mechanism of primary education in Prussia. There is not a single article but is literally borrowed from the law of 1819. This law, without entering into specialties relative to the several provinces, neglects no object of interest. As a legislative measure regarding primary instruction, it is the most comprehensive and perfect with which I am acquainted.

"It is, indeed, impossible not to acknowledge its consummate wisdom. No inapplicable general principles; no spirit of system; no particular and exclusive views, govern the legislator; he avails himself of all the means conducive to his end, even when these means differ widely from each other. A king, an absolute king, has given this law; an irresponsible minister has counselled or digested it; yet no mistaken spirit of centralization or ministerial bureaucracy is betrayed; almost every thing is committed, to the authorities of the commune, of the department, of the province; with the minister is left only the impulsion and general superintendence. The clergy have an ample share in the direction of popular instruction, and the fathers of families are likewise consulted in the towns and in the villages. In a word, all the interests naturally concerned in the business, find their place in this organization, and concur each in its own manner to the common end—the civilisation of the people.

"This Prussian law appears to me, therefore, excellent; but we are not to imagine it the result of one man's wisdom. Baron von Altenstein, by whom it was digested, is not its author; and it may be said to have already existed in a mass of partial ordinances, and in the usages and manners of the country. There is not, perhaps, a single article of this long law, of which there are not numerous precedents; and in a notice touching the history of primary education in Prussia, in Beckedorff's Journal, I find enactments of 1728 and 1736, comprising a large proportion of the regulations enforced by the law of 1819. The obligation on parents to send their children to school is of long standing in Prussia. The extensive interference of the Church in the education of the people ascends to the origin of Protestantism, to which it indeed belongs; for it is evident that a revolution, accomplished in the name of liberty of thought, behoved, for its own defence and establishment, to work out the mental emancipation of the people, and the diffusion of education. The law of 1819 undoubtedly pitches sufficiently high, what is to be taught in the elementary and burgher schools; but if this instruction appear excessive for certain localities, it must be stated that it is already practised, and even surpassed in many others. The boldest measure is the establishment of a

great seminary for the education of primary schoolmasters in each department; but there were already similar establishments in most of the ancient provinces of the monarchy. In fine, this law did hardly more than distribute uniformly what existed previously, not only in Prussia, but throughout the whole of Germany. It is not, therefore, a metaphysical Utopia, arbitrary and artificial, like the greater part of our laws concerning primary education, but a measure founded on experience and reality. And herein is seen the reason why it could be carried into effect, and why it has so rapidly produced the happiest fruits. Previously assured that it was every where practicable, the Prussian minister every where required its execution, leaving the details to the authorities to whom they belonged, and reserving only to himself the primary movement, the impulsion, and the verification of the whole. This impulsion has been so steady, this verification so severe, and the communal, departmental, and provincial authorities, the *School-board* in the provincial consistories, the *School-counsellor* in each council of department, the *Inspectors* in the circles, the *Commissions* in the towns, and the *Committees* in the urban and rural communes—all the authorities superintendent of the schools, have exerted a zeal at once so unremitted, and so well applied, that at present what the law prescribes is almost everywhere below what is actually performed. For example :—The law commands the establishment in each department of a great primary Seminary; and there is now, not only one such in every department, but frequently, likewise, several smaller subsidiary seminaries;—a result which, in a certain sort, guarantees all others; for such establishments can only flourish in proportion as the masters whom they prepare find comfortable appointments, and the comfortable appointment of masters says every thing in regard to the prosperity of primary instruction. The schoolmasters have been raised to functionaries of the state, and as such have now right to a retiring pension in their old age; and there is formed in every department a fund for the widows and orphans of schoolmasters, which the law has recommended rather than enforced. The greatest difficulty was to obtain, in the new provinces, and particularly those of the Rhine, the execution of that article of the law which, under rigorous penalties, imposes on parents the obligation of sending their children to school. The minister wisely suspended that part of the law in these provinces, and applied himself to accomplish a similar result by persuasion and emulation; then, at last, when he had disseminated the taste for education in these provinces, and deemed them sufficiently prepared, he, in 1825, rendered the law obligatory, and thenceforward strictly enforced its execution. [Examples.] The law has been universally applied, but with a prudent combination of mildness and rigour. Thus, &c. I have thought it useful to study the mode in which the Government has applied the general law of 1819 to the Grand Duchy of Posen, far behind even the provinces of the Rhine. I have under my eyes a number of documents, which prove the wisdom of the ministerial measures and the progress which primary instruction, and the civilisation it represents, have made in this Polish portion of the monarchy. It would be likewise desirable that there were published in French, all the ministerial and provincial instructions touching the application of the law of 1819 to the Jews, and the dissemination of a taste for edu-

cation in this portion of the Prussian population, numerous and wealthy, but comparatively unenlightened, and apprehensive lest the faith of their children might be perilled by an attendance on the public schools.

"In the present state of things, a law regarding primary education is, in France, assuredly a measure of indispensable necessity. But how is a good law to be framed in the absence of precedents, and of all experience in this important matter? The education of the people has been hitherto so neglected; the attempts have been so few, and these few so unsuccessful, that we are totally destitute of those common notions, those foreclosed opinions irradiated at once in our habits and judgments, which constitute the conditions and bases of a true legislation. I am anxious for a law, and a law I also dread; for I tremble lest we should again commence a course of visionary legislation, instead of turning our attention to what actually is. God grant that we be made to comprehend, that, at present, a law on primary education can only be a provisory, not a definitive measure; that of necessity it must be remodelled some ten years hence, and that the problem is only to supply the more urgent wants, and bestow a legislative sanction on some incontestible points. What are these points? I will attempt to signalize them from actual facts.

"The notion of compelling parents to send their children to school, is not perhaps sufficiently prevalent to enable us at present to pass it incontinently into a law; but all are at one in this—that a school is an establishment necessary in every commune, and it is readily admitted that this school should be maintained at the expense of the commune, allowing the commune, if too poor, to have recourse on the department, and the department on the state. This point, then, is not disputed, and ought to be ratified into a law. The practice has even preceded the enactment: during the last year the municipal councils have been every where voting the highest amount of funds within their means for the education of the people of their commune. There remains only to convert this almost general fact into a legal obligation.

"You are also aware, sir, that many councils of department have felt the necessity of ensuring the supply of schoolmasters, and their better education, by establishing within their bounds a primary normal school; and we may affirm, that in this expenditure there has been frequently more of luxury than of parsimony. This also is a valuable indication; and the law would only confirm and generalize what at present takes place almost every where, by decreeing a primary normal school for each department, as a primary school for every commune: it being understood that this primary normal school should be of greater or less extent, in proportion to the resources of each department.

"Here, then, are two very important points on which all are agreed: Have you not also been struck with the demands of a great many towns, large and small, for schools superior to the common primary schools, and in which the instruction, without attempting to emulate our royal and communal colleges in classical and scientific studies, should devote a more particular attention to objects of a more general utility, and indispensable to that numerous class of the population which, without entering into the learned professions, finds, however, the want of a more extensive and varied culture

than the lower orders, strictly so called—the peasants and artisans? The towns every where call out for such establishments; several municipal councils have voted considerable funds for this purpose, and have addressed themselves to you, in order to obtain the necessary authorization, assistance, and advice. Here it is impossible not to observe the symptom of a veritable want, the indication of an important chasm in our system of public education. You are well aware that I am a zealous defender of classical and scientific studies; not only do I think that it is expedient to keep up our collegial plan of studies, more especially the philological department of that plan, but I am convinced that it ought to be strengthened and extended, and thereby, always maintaining our incontestible superiority in the physical and mathematical sciences, to be able to emulate Germany in the solidity of our classical instruction. In fact, classical studies are, beyond comparison, the most essential of all, conducing, as they do, to the knowledge of our humanity, which they consider under all its mighty aspects and relations: here, in the language and literature of nations who have left behind a memorable trace of their passage on the earth; there, in the pregnant vicissitudes of history, which continually renovate and improve society; and finally, in philosophy, which reveals to us the simple elements, and the more uniform organization of that wondrous being, which history, literature, and languages successively clothe in forms the most diversified, and yet always relative to some more or less important part of its internal constitution. Classical studies maintain the sacred tradition of the intellectual and moral life of our humanity. To enfeeble them would, in my eyes, be an act of barbarism, an attempt against true civilisation, and in a certain sort, the crime of lese-humanity. May our royal colleges, then, and even a large proportion of our communal, continue to introduce into the sanctuary the flower of our French youth; they will deserve well of their country. But the whole population—can it, ought it, to enter our colleges? In France, primary education is but a scantling; and between this education and that of our colleges, there is a blank; hence it follows that every father of a family, in the lower part of the bourgeoisie, who has the honourable desire of bestowing a suitable education on his sons, can only do so by sending them to college. Serious inconveniences are the result. In general, these young men, who are not conscious of a lofty destination, prosecute their studies with little assiduity; and when they return to the profession and habits of their family, as nothing in the routine of their ordinary life occurs to recall and keep up their college studies, a few years are sure to obliterate the smattering of classical knowledge they possessed. They also frequently contract at college acquaintances and tastes which make it almost impossible to accommodate themselves again to the humble condition of their parents: hence a race of restless men, discontented with their lot, with others, and with themselves, enemies of a social order, in which they do not feel themselves in their place, and ready, with some acquirements, a talent more or less solid, and an unbridled ambition, to throw themselves into all the paths either of servility or revolt. Our colleges should undoubtedly remain open to all, but we ought not to invite into them, without discretion, the lower orders; and this we do, unless we establish institutions intermediate between the primary schools and the colleges. Germany, and Prussia in particular, are rich in establishments of this descrip-

tion. I have already described several in detail, at Frankfort, Weimar, Leipzig; and they are consecrated by the Prussian law of 1819. You are aware that I speak of what are called Burgher-schools (*Buergerschulen*), a word which accurately contradistinguishes them from the Learned Schools (*Gelehrtschulen*), called in Germany Gymnasia, and with us Colleges; a name in other respects honourable to the bourgeoisie, who are not degraded by attending these schools, and to the people, who are thus elevated to the bourgeoisie. The burgher schools constitute the higher degree of primary instruction, of which the elementary schools are the lower. There are thus only two degrees: 1. The *elementary school*, which is the common basis of all popular education in town and country; 2. The *Burgher school*, which, in towns of every size where there exists a middle class, affords to all those who are not destined for the learned professions, an education sufficiently extensive and liberal. The Prussian law, which fixes a maximum for the instruction of the elementary school, fixes a minimum for that of the burgher-school; and there are two very different examinations, in order to obtain the license of primary teacher in these several degrees. The elementary school ought to be one; for it represents, and is destined to foster and confirm, the national unity, and, in general, it is not right that the limit fixed by law for the instruction in the elementary school should be overpassed; but the case is different in the burgher-school; as this is destined for a class essentially different, the middle class; and it should naturally be able to rise in accommodation to the higher circumstances of that class in the more important towns. Thus it is that in Prussia the burgher-school has various gradations, from the minimum fixed by law, with which I have made you acquainted, up to that higher degree where it is connected with the Gymnasium, properly so denominated, and thus sometimes obtains the name of *Progynasium*. I transmit you an instruction relative to the different progymania in the department of Munster; you will there see that these establishments are, as the title indicates, preparatory gymnasia, where the classical and scientific instruction stops within certain limits, but where the burgher class can obtain a truly liberal education. In general, the German burgher-schools, somewhat inferior to our colleges in classical and scientific studies, are incomparably superior to them in what is taught of religion, geography, history, the modern languages, music, drawing, and national literature. In my opinion, it is of the very highest importance to establish in France, by one name or other, burgher-schools, under various modifications, and to remodel to this form a certain number of our communal colleges. I regard this, sir, as an affair of state. Let it not be said that we have already various degrees of primary instruction in France, and that what I require has been already provided. There is nothing of the kind; we have three degrees, it is true, but ill-defined; the distinction is therefore naught. These three degrees are an arbitrary classification, the principle of which I do not pretend to comprehend, whilst the two degrees determined by the Prussian law are manifestly founded on the nature of things. Finally, comprehending these two degrees within the circle of primary education, it is not unimportant to distinguish and characterise them by different names; but these names—schools of the third, second, and first degree—mark nothing but abstract differences; they speak not to the imagination, and

make no impression on the intellect. In Prussia, the names, Elementary School and Burgher-school, as representing the inferior and superior degrees of primary instruction, are popular. That of *Mittelschule* (Middle-school) is also employed in some parts of Germany,—a name which might, perhaps, be conveniently adopted by us. That, and Elementary School, would comprehend the two essential degrees of primary instruction; and our primary normal schools would furnish masters equally for both degrees; for whom, however, there behoved to be two kinds of examinations, and two kinds of licenses. There would remain for you only to fix a minimum for the middle school, as you would undoubtedly do for the elementary school, taking care to allow the several departments gradually to surpass their minimum, according to their resources and their success.

"This is what appears to me substantially contained in all the petitions addressed to you by the towns, whether to change the subjects taught in our communal colleges; whether to add to the classical and scientific instruction afforded in our royal colleges, other courses of more general utility; whether, in fine, to be allowed schools which they know not how to name, and which more than once they have denominated *Industrial Schools*, in contradistinction to our colleges. Care must be taken not to weaken the classical studies of our colleges; on the contrary, I repeat it, they ought to be strengthened. We should avoid the introduction of two descriptions of pupils into our colleges; this is contrary to all good discipline, and would unavoidably enervate the more difficult studies to the profit of the easier. Neither is it right to give the name of industrial schools to schools in which the pupils are not supposed to have any particular vocation. The people feel only their wants; it belongs to you, sir, to make choice of the means by which these wants are to be satisfied. A cry is raised from one extremity of France to the other, demanding for three-fourths of the French nation establishments intermediate between the simple elementary schools and the colleges. The prayers are urgent; they are almost unanimous. Here again is a point of the very highest importance, on which it would be easy to dilate. The general prayer, numerous attempts more or less successful, call out for a law, and render it at once indispensable and easy."

Our limits compel us to conclude, leaving much interesting matter of the *Rapport* unnoticed, and the whole *Projet de Loi*. What we have extracted of the former, will afford a sample of the exceeding importance of its contents. Of this we have before us a German translation by Dr Kroeger of Hamburgh, who has appended some valuable notes; but, though the work is of incomparably greater importance for this country, we have little expectation that it will appear in English. [It has however; thanks to the enlightened zeal of Mrs Austin.] We are even ignorant of our wants. In fact, the difficulty of all educational improvement in Britain lies less in the amount, however enormous, of work to be performed, than in the notion that not a great deal is requisite. Our pædagogical ignorance is only equalled by our pædagogical

conceit; and where few are competent to understand, all believe themselves qualified to decide.

Had our limits permitted, we should have said something of the history of primary education in Germany; and a word on the system of popular instruction in some of the North American democracies, which, however inferior, still approaches nearest to that established in the autocratic monarchies of the empire. We should also have attempted to show, though somewhat startling in its appliance to ourselves, that Aristotle's criterion of an *honest and intelligent* government holds universally true. A government, says the philosopher, ruling for the benefit of all, is, of its very nature, anxious for the education of all, not only because intelligence is in itself a good, and the condition of good, but even in order that its subjects may be able to appreciate the benefits of which it is itself the source; whereas a government ruling for the profit of its administrators, is naturally willing to debase the mind and character of the governed, to the end that they may be disqualified to understand, to care for, and to assert their rights. But we must leave these inquiries for the present; trusting to be able, ere long, to resume them.

APPENDICES.

APPENDIX I. PHILOSOPHICAL.

(A.) CONDITIONS OF THE THINKABLE SYSTEMATISED; ALPHABET OF HUMAN THOUGHT.

A.) NEGATIVE (or impossible); as *Existence* is not mentally affirmable. = *Nothing*. And this, as there is violated the *Condition* of

B.) POSITIVE (or possible); as *Existence* is mentally affirmed, = *Something*. And this under the two *Conditions* of

I.) NON-CONTRADICTION. (the law of things and of thought,) is—*Nihil purum*, *The really Impossible*. (Objective and Subjective.)

II.) RELATIVITY, (the law of thought, not of things,) is—*Nihil cogitabile*, *The Impossible to thought*. (Subjective.)

I.) NON-CONTRADICTION; giving *The Not-impossible in reality and in thought*, under its { i.) *Identity*,
{ ii.) *Contradiction*,
{ iii.) *Excluded Middle*.

{ *Knowledge*; i. e. between Subject and Object, as the condition of Knowing; and here, while the Subject is always Self, the Object is either of Self (Subject-object) or of Not-Self (Object-object.) 1.) SUBJECT & OBJECT,

{ *Intrinsic, Qualitative*: ii.) SUBSTANCE AND QUALITY.

{ *Existence*, i. e. in Objects, as conditions of Being Known, comprising those

{ *Extrinsic, Quantitative*; and these (Continuous or Discrete) of *Quantity*

{ *Protensive*: iii.) TIME; applying to Substance and Quality. (*Cause and Effect*; etc.)

{ *Extensive*: iv.) SPACE; applying to Substance. (*Ultimate Incompressibility*; etc.)

{ *Intensive*: v.) DEGREE; applying to Quality. (*Action and Passion*;—*Power, Active and Passive*; etc.)

Contingent and Derivative. May be variously classified, but no classification can be here detailed.

THINKING
is

THINKING (employing that term as comprehending all our cognitive energies,) is of two kinds. It is either A) Negative or B) Positive.

A.) Thinking is NEGATIVE, (in propriety, a negation of thought,) when *Existence* is not attributed to an object.* It is of two kinds; in as much as the one or the other of the conditions of positive thinking is violated. In either caso, the result is—*Nothing*.

I.) If the condition of *Non-contradiction* be not fulfilled, there emerges *The really Impossible*, what has been called in the schools, *Nihil purum*.

II.) If the condition of *Relativity* be not purified, there results *The Impossible to thought*; that is, what may exist, but what we are unable to conceive existing. This impossible, the schools have not contemplated; we are, therefore, compelled, for the sako of symmetry and precision, to give it a scholastic appellation in the *Nihil cogitabile*.

B.) Thinking is POSITIVE, (and this in propriety is the only real thought,) when *Existence* is predicated of an object. By existence is not, however, here meant real or objective existence, but only existence subjective or ideal. Thus, imagining a Centaur or Hippogryph, we do not suppose that the phantasm has any being beyond our imagination; but still we attribute to it an actual existence in thought. Nay, we attribute to it a possible existence in creation; for we can represent nothing, which we do not think, as within the limits of Almighty power to realise. Nothing, therefore, can be more erroneous than to make, as is very commonly done, "chimerical" tantamount to "contradictory."—Positive thinking can be brought to bear only under two conditions; the condition of I) *Non-contradiction*, and the condition of II) *Relativity*. If both are fulfilled, we think—*Something*.

* It might be supposed that Negative thinking being a negation of thought is in propriety a negation therefore, absolutely, of all mental activity. But this would be erroneous. In fact, as Aristotle observes (*Soph. Elench. C. xxxi. § 1.*), every negation involves an affirmation, and we cannot think or predicate non-existence, except by reference to existence. Thus even Negative thought is realised only under the condition of *Relativity* and *Positive* thinking. For example; we try to think—to predicate existence, in some way, but find ourselves unable. We then predicate *incogitability*, and if we do not always predicate, as an equivalent, (objective) *non-existence*, we shall never err.

I.) NON-CONTRADICTION. This condition is insuperable. We think it, not only as a law of thought, but as a law of things; and while we suppose its violation to determine an absolute impossibility, we suppose its fulfilment to afford only the *Not-impossible*. Thought is, under this condition, merely *explicative* or *analytic*; and the condition itself is brought to bear under three phases, constituting three laws: i.)—the law of *Identity*; ii.)—the law of *Contradiction* (more properly of Non-contradiction); iii.)—the law of *Excluded Middle* (i. e. between two contradictories). The science of these laws is *Logic*; and as the laws are only explicative, *Logic* is only *formal*. (The principle of *Sufficient Reason* should be excluded from *Logic*. For, in as much as this principle is not material (material=non-formal,) it is only a derivation of the three formal laws; and in as much as it is material, it coincides with the principle of Causality, and is extra-logical).

Though necessary to state the condition of Non-contradiction, there is no dispute about its effect, no danger of its violation. When, therefore, I speak of the *Conditioned*, the term is used in special reference to Relativity. By Existence Conditioned, is meant, emphatically, existence relative, existence thought under relation. Relation may thus be understood to contain all the categories and forms of positive thought.

II.) RELATIVITY. This condition (by which, be it observed, is meant the *relatively or conditionally Relative*, and, therefore, not even the Relative, absolutely or infinitely.)—this condition is not insuperable. We should not think it as a law of things, but merely as a law of thought; for we find that there are contradictory opposites, one of which, by the rule of Excluded Middle, must be true, but neither of which can by us be positively thought, as possible.—Thinking, under this condition, is *ampliative* or *synthetic*. Its science, *Metaphysic*, (using that term in a comprehensive meaning,) is therefore *material*, in the sense of non-formal. The condition of Relativity, in so far as it is *necessary*, is brought to bear under two principal relations; the one springing from the *subject* of knowledge—the mind thinking, (*the relation of Knowledge*); the other (which is subdivided) from the *object* of knowledge—the thing thought about, (*the relations of Existence*).

(Besides these *necessary* and original relations, of which alone it is requisite to speak in an alphabet of human thought, there are many relations, *contingent* and derivative, which we frequently employ in the actual applications of our cognitive energies. Such

for example (without arrangement,) as—Absolute and Relative, One and Other, Same and Different, True and False, Good and Bad, Perfect and Imperfect, End and Mean, Easy and Difficult, Desire and Aversion, Simple and Complex, Uniform and Various, Singular and Universal, Whole and Part, Similar and Dissimilar, Congruent and Incongruent, Equal and Unequal, Orderly and Disorderly, Beautiful and Deformed, Material and Immaterial, Natural and Artificial, Organised and Inorganised, Young and Old, Male and Female, Parent and Child, &c. &c. These admit of classification from different points of view ; but to attempt their arrangement at all, far less on any exclusive principle, would here be manifestly out of place.)

i.) The relation of *Knowledge* is that which arises from the reciprocal dependence of the subject and object of thought, **SUBJECTIVE AND OBJECTIVE**, including *Self and Not-Self*, or *Ego and Non-Ego*. Whatever comes into consciousness, is thought by us, either as belonging to the mental self, exclusively, (subjectivo-subjective), or as belonging to the not-self, exclusively, (objectivo-objective,) or as belonging partly to both, (subjectivo-objective). It is difficult, however, to find words to express precisely all the correlations of knowledge. For in cognizing a mere affection of self, we objectify it ; it forms a subject-object or subjective object, or subjectivo-subjective object ; and how shall we name and discriminate a mode of mind, representative of and relative to a mode of matter ? This difficulty is, however, strictly psychological. In so far as we are at present concerned, it is manifest that all these cognitions exist for us, only as terms of a *correlation*.

The relations of *Existence*, arising from the object of knowledge, are twofold ; in as much as the relation is either **Intrinsic** or **Extrinsic**.

ii.) As the relation of Existence is *Intrinsic*, it is that of **SUBSTANCE AND QUALITY**, (Quality being variously styled, Form, Accident, Property, Mode, Affection, Phenomenon, Appearance, Attribute, Predicate, Denomination, &c.) It may be called *Qualitative*.

Substance and Quality are, manifestly, only thought as mutual *relatives*. We cannot think a quality existing absolutely, in or of itself. We are constrained to think it, as inhering in some basis, substratum, hypostasis, subject or substance ; but this substance cannot be conceived by us, except negatively, that is, as the unap-

parent—the inconceivable correlative of certain appearing qualities. If we attempt to think it positively, we can think it only by transforming it into a quality or bundle of qualities, which, again, we are compelled to refer to an unknown substance, now necessarily supposed for their incogitable basis. Everything, in fact, may be conceived as the quality, or as the substance of something else. But absolute substance and absolute quality, these are both inconceivable, as more than negations of the conceivable.—It is hardly requisite to observe, that the term Substance is vulgarly applied, in the abusive signification, to a congeries of qualities, denoting those especially which are more permanent, in contrast to those which are more transitory. (See the treatise *De Mundo*, attributed to Aristotle, c. iv.)

What has now been said, applies equally to Mind and Matter.

And in respect of mind, the terms Subject and Subjective have a double meaning ; 1°, common, in which sense they fall under this relation ; 2°, proper, as opposed to Object and Objective, in which sense they fall under the former relation.

As the relation of Existence is *Extrinsic*, it is threefold ; and as constituted by three species of Quantity, it may be called *Quantitative*. It is realised in or by : 1°, Protensive quantity, Protension, or Time ; 2°, Extensive quantity, Extension or Space ; 3°, Intensive quantity, Intension or Degree. These quantities may be all considered, either as *Continuous* or as *Discrete* ; and they constitute the three last great *relations* which we have here to signalise.

iii.) TIME, *Protension* or protensive quantity, called likewise *Duration*, is a necessary condition of thought. It may be considered both in itself and in the things which it contains.

Considered in itself.—Time is positively inconceivable, if we attempt to construe it in thought ;—either, on the one hand, as *absolute*,—absolutely commencing or absolutely terminating, or on the other, as *infinite* or eternal,—whether *ab ante* or *à post* ; and it is no less inconceivable, if we attempt to fix an *absolute* minimum or to follow out an *infinite* division.—It is positively conceivable : if conceived as an indefinite past, present or future ; and as an indeterminate mean between the two unthinkable extremes of an absolute least and an infinite divisibility. For thus it is *relative*.

In regard to Time Past and Time Future there is comparatively no difficulty, because these are positively thought as protensive quantities. But Time *Present*, when we attempt to realise it,

seems to escape us altogether—to vanish into nonentity. The present cannot be conceived as of any length, of any quantity, of any protension, in short, as any thing positive. It is only conceivable as a negation, as the point or line (and these are only negations) in which the past ends and the future begins,—in which they limit each other.

“Le moment où je parle, est déjà loin de moi.”

In fact, we are unable to conceive *how* we *do* exist; and speculatively, we must admit, in its most literal acceptation—

“*Victuros agimus semper, nec vicimus unquam.*”

The Eleatic Zeno's demonstration of the impossibility of Motion, is not more insoluble than could be framed a proof, that the Present has no reality; for however certain we may be of both, we can positively think neither. So true is it as said by St Augustin: “What is Time,—if not asked, I know; but attempting to explain, I know not.”

Things in Time are either co-inclusive or co-exclusive. Things co-exclusive:—if of the same time are, *pro tanto*, identical, apparently and in thought; if of different times, (as causes and effect, *causæ et causatum*.) they appear as different, but are thought as identical. Things co-exclusive are mutually, either *prior* and *posterior*, or *contemporaneous*.

The impossibility we experience of thinking negatively or as non-existent, non-existent, consequently in time (either past or future,) aught, which we have conceived positively or as existent,—this impossibility affords the principle of *Causality*, &c. (Specially developed in the sequel.)

Time applies to both Substance and Quality; and includes the other quantities, Space and Degree.

iv.) *SPACE, Extension* or extensive quantity is, in like manner, a necessary condition of thought; and may also be considered, both in itself, and in the things which it contains.

Considered in itself.—Space is positively inconceivable, either as *absolute* or as *infinite*?—it is unthinkable, as a whole, either infinitely unbounded, or absolutely bounded; it is unthinkable, as a part, either infinitely divisible, or absolutely indivisible.—Space, again, is positively conceivable:—as a mean between these extremes; in other words, we can think it either as an indefinite whole, or as an indefinite part. For thus it is *relative*.

The things contained in Space may be considered, either in relation to this quantity, or in relation to each other.—In relation

to Space: the extension occupied by a thing is called its *place*; and a thing changing its place, gives the relation of *motion* in space, space itself being always conceived as immovable,

—"stabilisque manens dat cuncta moveri."

—Considered in relation to each other. Things, spacially, are either inclusive, thus originating the relation of *containing* and *contained*; or co-exclusive, thus determining the relation of position or situation—of here and there, (*Ubication*.)

Space applies, proximately, to things considered as Substance; for the Qualities of substances, though they are in, may not occupy space. In fact, it is by a merely modern abuse of the term, that the affections of Extension have been styled *Qualities*. It is extremely difficult for the human mind to admit the possibility of unextended substance. Extension, being a condition of positive thinking, clings to all our conceptions; and it is one merit of the philosophy of the Conditioned, that it proves Space to be by a law of Thought, and not by a law of Things. The difficulty of thinking, or rather of admitting as possible, the immateriality of the soul, is shown by the tardy and timorous manner in which the inextension of the thinking subject was recognised in the Christian Church. Some of the early Councils and most of the Fathers maintained the extended, while denying the corporeal, nature of the spiritual principle; and, though I cannot allow, that Descartes was the first by whom the immateriality of mind was fully acknowledged, there can be no doubt, that an assertion of the inextension and illocality of the soul, was long and very generally eschewed, as tantamount to the assertion, that it was a mere nothing.

On Space are dependent what are called the *Primary* Qualities of body, strictly so denominated, and Space combined with Degree affords, of body, the *Secundo-primary* Qualities. (On this distinction, see Dissertations on Reid, p. 845—853.)

Our inability to conceive an absolute elimination from space of aught, which we have conceived to occupy space, gives the law of what I have called *Ultimate Incompressibility*, &c. (*Ib.* p. 847.)

v.) *DEGREE*, *Intension* or intensive quantity is not, like Time and Space, an absolute condition of thought. Existences are not necessarily thought under it; it does not apply to Substance, but to Quality, and that in the more limited and proper acceptation of the word. For it does not apply to what have (abusively)

been called by modern philosophers the Primary Qualities of body; these being merely evolutions of Extension, which, again, is not thought under Degree. (Dissertations on Reid, p. 846, sq.) Degree may, therefore, be thought as null, or as existing only potentially. But thinking it to be, we must think it as a Quantity; and, as a quantity, it is positively both inconceivable and conceivable.—It is positively inconceivable: *absolutely*, either as least or as greatest; *infinitely*, as without limit, either in increase or in diminution.—On the contrary, it is positively conceivable, in so far as it is conceived as *relative*; as indefinitely high or higher, as indefinitely low or lower.—The things thought under it; if of the same intension are correlatively uniform, if of a different degree, are correlatively higher or lower.

Degree affords the relations of *Actuality and Potentiality*,—of *Action and Passion*,—of *Power active, and Power passive*, &c.

Degree is, likewise, developed into what, in propriety, are called the *Secondary Qualities* of body; and combined with Space, into the *Secundo-primary*. (Diss. on Reid, p. 853, p. 848, sq.)

So much for the Conditions of Thinking, in detail.

If the general doctrine of the Conditioned be correct, it yields as a corollary that *Judgment*, that *Comparison*, that the cognition *Relativity* is implied in every apprehensive act, (as *Perception*, *Imagination*, &c.); and the fact, that *Consciousness* cannot be realised without an energy of *Judgment*, is, again, a proof of the correctness of the theory, asserting the universal *Relativity* of *Thought*.

The philosophy of the Conditioned even from the preceding outline, is, it will be seen, the express inverse of the philosophy of the Absolute,—at least, as this system has been latterly evolved in Germany. For this asserts to man a knowledge of the Unconditioned,—of the Absolute and Infinite; while that denies to him a knowledge of either, and maintains, all which we immediately know, or can know, to be only the Conditioned, the Relative, the Phenomenal, the Finite. The one, supposing knowledge to be only of existence in itself, and existence in itself to be apprehended, and even understood, proclaims—"Understand that you may believe," ("Intellige ut credas"); the other, supposing that existence, in itself, is unknown, that apprehension is only of

phenomena, and that these are received only upon trust, as incomprehensively revealed facts, proclaims, with the Prophet,—“Believe that ye may understand,” (“*Crede ut intelligas.*” Is. vii. 9, sec. lxx.)—But extremes meet. In one respect, both coincide; for both agree, that the knowledge of Nothing is the principle or the consummation of all true philosophy:—

“*Scire Nihil,—studium, quo nos letamur utrique.*”

But the one doctrine, openly maintaining that the Nothing must yield every thing, is a philosophic omniscience; whereas the other, holding that Nothing can yield nothing, is a philosophic nescience. In other words:—the doctrine of the Unconditioned is a philosophy confessing relative ignorance, but professing absolute knowledge; while the doctrine of the Conditioned is a philosophy professing relative knowledge, but confessing absolute ignorance. Thus, touching the Absolute and Infinite: the watchword of the one is,—“*Noscendo cognoscitur, ignorando ignoratur;*” the watchword of the other is,—“*Noscendo ignoratur, ignorando cognoscitur.*”

But which is true?—To answer this, we need only to examine our own consciousness; there shall we recognise the limited “extent of our tether.”

“*Tecum habita, et nôris quam sit tibi curta supellex.*”

But this one requisite is fulfilled (alas!) by few; and the same philosophic poet has to lament:—

“*Ut nemo in sese tentat descendere,—nemo;
Sed præcedenti spectatur mantica tergo!*”

To manifest the utility of introducing the principle of the Conditioned into our metaphysical speculations, I shall (always in outline) give one only, but that a signal illustration of its importance.

Of all questions in the history of philosophy, that concerning the origin of our judgment of *Cause and Effect* is, perhaps, the most celebrated; but, strange to say, there is not, so far as I am aware, to be found a comprehensive view of the various theories, proposed in explanation,—not to say, among these, any satisfactory explanation of the phenomenon itself.

The phenomenon is this:—When aware of a new appearance, we are *unable* to conceive that therein has originated any new existence, and are, therefore, *constrained* to think, that what now

appears to us under a new form, had previously an existence under others,—others conceivable by us or not. These *others* (for they are always plural) are called its cause; and a cause (or more properly causes) we cannot but suppose; for a cause is simply everything without which the effect would not result, and all such concurring, the effect cannot but result. We are utterly unable to construe it in thought as possible, that the complement of existence has been either increased or diminished. We cannot conceive, either, on the one hand, nothing becoming something, or, on the other, something becoming nothing. When God is said to create the universe out of nothing, we think this, by supposing, that he evolves the universe out of nothing but himself; and, in like manner, we conceive annihilation, only by conceiving the creator to withdraw his creation, by withdrawing his creative energy from actuality into power.

“ Nil posse creari

De Nihilo, neque quod genitu 'st ad Nil revocari ;”

——“ Gigni

De Nihilo Nihil, in Nihilum Nil posse reverti :”—

—these lines of Lucretius and Persius enounce a physical axiom of antiquity; which, when interpreted by the doctrine of the Conditioned, is itself at once recalled to harmony with revealed truth, and expressing, in its purest form, the conditions of human thought, expresses also, implicitly, the whole intellectual phenomenon of causality.

The mind is thus compelled to recognise an absolute identity of existence in the effect and in the complement of its causes,—between the *causatum* and the *causæ*. We think the causes to contain all that is contained in the effect; the effect to contain nothing but what is contained in the causes. Each is the sum of the other. “ *Omnia mutantur, nihil interit.*” is what, with Ovid, we think, and must think; nor can the change itself be thought without a cause. Our judgment of causality simply is:—We necessarily deny, or rather, are unable to affirm in thought, that the object which we apprehend as beginning to be, really so begins; but, on the contrary, affirm, as we must, the identity of its present sum of being, with the sum of its past existence.—And here, it is not requisite for us to know, or even to be able to conceive, under what form or under what combination this quantum previously existed; in other words, it is unnecessary for us to recognise the particular causes of this particular effect. A dis-

covery of the determinate antecedents into which a determinate consequent may be refunded, is merely contingent,—merely the result of experience; but the judgment, that every event should have its causes, is necessary, and imposed on us, as a condition of our human intelligence itself. *This necessity of so thinking, is the only phenomenon to be explained.* The question of philosophy is not concerning *the* cause, but concerning *a* cause.

Now, taking into account even the philosophers who, like Dr Thomas Brown,* quietly eviscerate the problem of its sole difficulty, nor enumerating alone the theories which do not accommodate the phenomenon to be explained to their attempts at explanation,—these are, in all, *eight*.

And, in the first place, they fall into two supreme classes. The one (A) comprehends those theories which consider the causal judgment as *adventitious*, or *a posteriori*, that is, as derived from experience (*empirical*); the other (B) comprehends those which view it as *native*, *pure*, or *a priori*, that is, as a condition of intelligence itself (*noetic*).—The two primary genera are, however, severally subdivided into various species.

The former class (A) falls into two subordinates; in as much as the judgment is viewed as founded either on an *original* (a) or on a *derivative* (b) cognition.

Each of these is finally distributed into two; according as the judgment is supposed to have an *objective* or a *subjective* origin.—In the former case (a) it is objective, perhaps *objectivo-objective*, when held to consist in an *immediate apprehension of the efficiency of causes in the external and internal worlds* (1); and subjective, or rather *subjectivo-objective*, when viewed as given through a *self-consciousness alone of the efficiency of our own volitions* (2).—In the latter case (b) it is regarded, if objective, as a *product of induction and generalisation*; if subjective, as a *result of association and custom* (4).

In like manner, the latter supreme class (B) is divided into two, according as the opinions under it, view in the causal judgment, a law of thought:—either *original*, *primary*, (c); or *secondary*, *derived*, (d).

It is a corollary of the former doctrine (c), that the judgment

* The fundamental vice of Dr Brown's theory has been, with great acuteness, exposed by his successor, Professor Wilson. (See Blackwood's Magazine, July 1836, vol. xl., p. 122, sq.)—(1853.) In the former edition of these Discussions, Dr Brown's theory was thrown out of account.

is a *positive act*, an *affirmative deliverance of intelligence*. But while almost all philosophers maintain that this judgment is a *necessary* or *constraining act* (5); a few have been found to view in it only a *contingent* or *inclining principle* (6).—The latter doctrine (d), on the other hand, considers the judgment as of a *negative* character; and is also subdivided into two. For some maintain that the principle of causality may be carried up *into the Principle of Contradiction*, (Non-contradiction) (7); whilst, though not previously attempted, it may be argued that the judgment of causality is a derivation from the *Condition of Relativity in Time* (8).

(The opposite Table affords a general conspectus of these opinions.)

First and Second theories.—Of these eight opinions, the first has always been held in combination with the second; whereas, the second has been frequently held by those who abandon the first. Considering them together, that is, as the opinion, that we immediately apprehend the efficiency of causes external or internal;—this is obnoxious to two fatal objections.

The *first* is,—that we have no such apprehension, no such experience. It is now, indeed, universally admitted, that we have no perception of the causal nexus in the material world. Hume it was, who decided the opinion of philosophers upon this point. But though he advances his refutation of the vulgar doctrine as original, he was, in fact, herein only the last of a long series of metaphysicians, some of whom had even maintained their thesis not less lucidly than the Scottish sceptic. I cannot indeed believe, that Hume could have been ignorant of the anticipation.—But whilst surrendering the *first*, there are many philosophers who still adhere to the *second*, opinion;—a theory which has been best stated and most strenuously supported by the late M. Maine de Biran, one of the acutest metaphysicians of France. I will to move my arm, and I move it. When we analyse this phenomenon, says De Biran, the following are the results:—1°, the consciousness of an act of will; 2°, the consciousness of a notion produced; 3°, the consciousness of a relation of the motion to the volition. And what is this relation? Not one of simple succession. The will is not for us an act without efficiency; it is a productive energy; so that, in a volition, there is given to us the notion of *cause*; and this notion we subsequently project out from our internal activities into the changes of the external

SCHEME OF THEORIES AS TO THE ORIGIN OF THE CAUSAL JUDGMENT.

JUDGMENT OF CAUSALITY.			
A) EMPIRICAL or à posteriori; and this positive, as a power exerted;	a) <i>Original</i> ;	Objective. (1)	Necessary principle, i. e. of inevitable thought ;— "Law of Causality," or All that begins to be must have its Cause. (5)
		Subjective. (2)	
	b) <i>Derivative</i> ;	Objective. (3)	
		Subjective. (4)	
B) NOETIC or à priori;	c) <i>Original</i> ; and this Positive, as a power exerted, identical with a		Contingent principle, i. e. of inclined thought ;— "Expectation of Nature's constancy." (6)
	d) <i>Derivative</i> ; and this Negative, as an impossibility or impotence determined by a		Law of Things and of Thought ;—"Contradiction." —A knowing energy, and also objective. (7)
			Law of Thought (not of Things) ;—"Relativity in Time."—An unknowing passivity, and merely subjective. (8)

world.—But the empirical fact, here asserted, is incorrect. For between the overt fact of corporeal movement, which we perceive, and the internal act of the will to move, of which we are self-conscious, there intervenes a series of intermediate agencies, of which we are wholly unaware; consequently, we can have no consciousness, as this hypothesis maintains, of any causal connection between the extreme links of this chain, that is, between the volition to move and the arm moving. (See *Dissertations on Reid*, p. 866.)

But independently of this, the *second* objection is fatal to the theory which would found the judgment of causality on any empirical apprehension, whether of the phenomena of mind or of the phenomena of matter. Admitting the causal efficiency to be cognisable, and perception with self-consciousness to be competent for its apprehension, still as these faculties can inform us only of individual causations, the quality of necessity and consequent universality by which this judgment is characterised remains wholly unexplained. (On this objection, see Cousin upon Locke.)

So much indeed is candidly confessed by Hobbes, Hume, and many of the most strenuous advocates for the philosophy of experience.

But waiving these objections, and restricting the *second* doctrine to the consciousness of efficiency in thought itself; this theory, as it does not enable us to explain the necessity and universality of the causal judgment, so it does not aid us to escape from fatalism, by rendering conceivable the possibility of Liberty. For a consciousness of self-efficiency does not help us to conceive that efficiency itself absolutely commencing; that is, acting,—not determined to act,—not determined to determine itself to act, by any anterior or foreign motive cause. We cannot conceive a will willing merely as it wills; for we are unable to conceive an act of will, as not an effect,—i. e. as undetermined by a motive; and if we identify, as we may, the motive with an anterior act of will, we fall at once into the inconceivability of an infinite series of previous volitions. Nor is there a whit here gained by saying, that the *Man* determines himself—not the *Will*—not the *Motive*. For the *will* is merely a short expression for the *man willing*; and a *motive determining* is only a compendious abbreviation for *what determines a man willing, to determine himself*. (See Footnotes on Reid, pp. 608, 611, alibi.)—That, though inconceivable, a

motiveless volition would, if conceived possible, be conceived as morally worthless, only shews out our impotence more clearly.

So much for the two theories at the head of our enumeration.

. As the first and second opinions have been usually associated, so also have been the third and fourth.

Third theory.—In regard to the third opinion, it is manifest, that the observation of certain phenomena succeeding certain other phenomena, and the generalisation, consequent thereon, that these are reciprocally Causes and Effect,—it is manifest that this could never of itself have engendered, not only the strong, but the *irresistible*, conviction, that *every* event *must* have its causes. Each of these observations is contingent, and any number of observed contingencies will never impose upon us the consciousness of necessity, that is, the consciousness of an inability to think the opposite. This theory is thus logically absurd. For would infer as a conclusion, the universal necessity of the causal judgment, from a certain number of actual consecutions; that is, it would collect that *all must be*, because *some are*. Logically absurd, it is also psychologically false. For we find no difficulty in conceiving the *reverse* of one or of all observed consecutions; and yet, the causal judgment which, ex hypothesi, is only the result of these observations, we cannot possibly think, as possibly unreal. We have always seen a stone returning to the ground when thrown into the air; but we find no difficulty in representing to ourselves some or all stones rising from the earth; nay, we can easily suppose even gravitation itself to be reversed. Only, we are unable to conceive the possibility of this or of any other event,—without a cause.

Fourth opinion.—Nor does the fourth theory afford a better solution. The *necessity* of so thinking, cannot be derived from a *custom* of so thinking. The force of custom, influential as it may be, is still always limited to the customary; and the customary never reaches, never even approaches, to the necessary. Association may explain a strong and special, but it can never explain a universal and absolutely irresistible belief.—On this theory, also, when association is recent; the causal judgment should be weak, and rise only gradually to full force, as custom becomes inveterate. But we do not find that this judgment is feebler in the young, stronger in the old. In neither case, is there less and more; in both cases the necessity is complete.—Mr Hume patronized the opinion, that the causal judgment is an offspring of expe-

rience engendered upon custom. But those have a sorry insight into the philosophy of that great thinker who suppose, like Brown, that this was a dogmatic theory of his own, or one considered satisfactory by himself. On the contrary, in his hands it was a reduction of the prevalent dogmatism to palpable absurdity, by shewing out the inconsistency of its results. To the Lockian sensualism, Hume proposed the problem,—to account for the phenomenon of necessity in our thought of the causal nexus. That philosophy afforded no other principle than the custom of experience, through which even the attempt at a solution could be made; and the principle of custom Hume shews could never account for the product of any *real* necessity. The alternative was plain. Either the doctrine of sensualism is false; or our nature is a delusion. Shallow thinkers admitted the latter alternative, and were lost; profound thinkers, on the contrary, were determined to build philosophy on a deeper foundation than that of the superficial edifice of Locke: and thus it is, that Hume has, immediately or mediately, been the cause or the occasion of whatever is of principal value in the subsequent speculation of Scotland, Germany, and France.

Fifth Theory.—We come now to the second supreme genus (B),—that which maintains the causal judgment to be a deliverance of *intelligence*.—Of the four opinions which it comprises, the two first agree in holding, that the causal judgment may be identified with a primary intellectual principle. Of these the first (the fifth in general) maintains that this principle is *necessary*, that is, making its rejection in thought impossible. To this are to be referred the relative theories of Descartes, Leibnitz, Kames, Reid, Kant, Fichte, Bouterweck, Jacobi, Stewart, Cousin, and the majority of recent philosophers.

Without descending to details, it is manifest in general, that against the assumption of a special principle, which this doctrine makes, there exists a primary presumption of philosophy. This is the Law of Parcimony: which prohibits, without a proven necessity, the multiplication of entities, powers, principles or causes; above all, the postulation of an unknown force where a known impotence can account for the phenomenon. We are, therefore, entitled to apply "Occam's Razor" to this theory of causality, unless it be proved impossible to explain the causal judgment at a cheaper rate, by deriving it from a common, and that a negative, principle. On a doctrine like the present, is thrown the burthen

of vindicating its necessity, by shewing that unless a special and positive principle be assumed, there exists no competent mode to save the phenomenon. The opinion can, therefore, only be admitted provisionally; and it falls, of course, if what it would explain can be explained on less onerous conditions.

Leaving, therefore, this theory, which certainly does account for the phenomenon, to fall or stand, according as either of the two last opinions be, or be not, found sufficient, I go on to that preceding these—the sixth theory.

Sixth opinion.—As formerly, so I should now have omitted any articulate enumeration of this theory. But having been actually maintained, it is entitled always to an historical recognition; and it is entitled, even philosophically, to notice, if what Varro and Cicero say be true, that no opinion can be imagined so absurd, which has not found some philosopher to assert it.—Now, Dr Brown would identify our *conviction* of the causal dependence with our *presumption* of the constancy of nature. But apart from all subordinate objections, it is sufficient to say: that the phenomenon to be explained is the *necessity* of thinking,—the absolute *impossibility* of not thinking, a cause; whilst all that the latter principle pretends to is *to incline us to expect*, that like antecedents will be followed by like consequents. This *necessity* to suppose a cause for every phenomenon, Dr Brown, if he does not expressly deny, keeps cautiously out of view,—virtually, in fact, eliminating all that requires explanation in the problem.

Seventh opinion.—The seventh and eighth theories agree with the fifth and sixth, in regarding the causal judgment as of an *à priori* origin; but differ from them, in viewing it as derivative and secondary.—The seventh theory has been long exploded. It attempts to derive the causal judgment from the principle of Contradiction. Leibnitz was too acute a metaphysician to attempt the resolution of the principle of Sufficient Reason or Causality, which is ampliative or synthetic, into the principle of Contradiction, which is merely explicative or analytic. But his followers were not so wise. Wolf, Baumgarten, and many other Leibnitians, paraded demonstrations of the law of Sufficient Reason on the ground of the law of Contradiction; but the reasoning always proceeds on a covert assumption of the very point in question. The same argument is, however, at an earlier date, to be found in Locke, while modifications of it are also given by Hobbes and Samuel Clarke. Hume, who was

only aware of the demonstration, as proposed by the English metaphysicians, honours it with a refutation which has obtained even the full approval of Reid; whilst by foreign philosophers, the inconsequence of the reduction, at the hands of the Wolfian metaphysicians, has frequently been exposed. I may therefore pass it in silence.

Eighth opinion.—The field is thus open for the last theory, which would analyse the judgment of causality into a result of the mental law of the Conditioned. This theory, which has not hitherto been proposed, comes recommended by its cheapness and simplicity. It postulates no new, no express, no positive principle. It merely supposes that the mind is limited; the law of limitation,—the law of the Conditioned constituting, in one of its applications, the law of Causality. The mind is astricted to think in certain forms; and, under these, thought is possible only in the conditioned interval between two unconditioned contradictory extremes or poles, each of which is altogether inconceivable, but of which, on the principle of Excluded Middle, the one or the other is necessarily true. In reference to the present question, it need only be recapitulated, that we must think under the condition of *Existence*,—*Existence Relative*,—and *Existence Relative in Time*. But what does *existence relative in time* imply? It implies, 1°, that we are unable to realise in thought: on the one pole of the irrelative, either an *absolute* commencement, or an *absolute* termination of time; as on the other, either an *infinite* non-commencement, or an *infinite* non-termination of time. It implies, 2°, That we can think, neither, on the one pole, an *absolute* minimum, nor; on the other, an *infinite* divisibility of time. Yet these constitute two pairs of contradictory propositions; which, if our intelligence is not all a lie, cannot both be true, whilst, at the same time, either the one or the other necessarily must. But, as *not relatives*, they are not cogitables.

Now the phenomenon of Causality seems nothing more than a corollary of the law of the Conditioned, in its application to a thing thought under the form or mental category of *Existence Relative in Time*. We cannot know, we cannot think a thing, except under the attribute of *Existence*; we cannot know or think a thing to exist, except as *in Time*; and we cannot know or think a thing to exist in Time, and think it *absolutely to commence or terminate*.* Now this at once imposes on us the judgment of

* How easily the difficulty from the *simultaneity* of Cause and Effect or

causality. Unable positively to think an absolute commencement, our impotence to this drives us backwards on the notion of *Cause*; unable positively to think an absolute termination, our impotence to this drives us forwards on the notion of *Effect*.—More articulately thus:—An object is given us, either by our presentative, or by our representative, faculty. As given, we cannot but think it Existent, and existent in Time. But to say, that we cannot but think it to exist, is to say, that we are unable to think it non-existent,—to think it away,—to annihilate it in thought. And this we cannot do. We may turn away from it; we may engross our attention with other objects; we may, consequently, exclude it from our thought. That we need not think a thing is certain; but thinking it, it is equally certain that we cannot think it not to exist. So much will be at once admitted of the present; but it may probably be denied of the past and futuro. Yet if we make the experiment, we shall find the mental annihilation of an object, equally impossible under time past, and present, and futuro. To obviate, however, misapprehension, a very simple observation may be proper. In saying that it is impossible to annihilate an object in thought, in other words, to conceive as non-existent, what had been conceived as existent,—it is of course not meant, that it is impossible to imagine the object wholly changed in form. We can represent to ourselves the elements of which it is composed, divided, dissipated, modified in any way; we can imagine anything of it, short of annihilation. But the complement, the quantum, of existence, thought as constituent of an object,—that we cannot represent to ourselves, either as increased, without abstraction from other entities, or as diminished, without annexation to them. In short, we are unable to construe it in thought, that there can be an atom absolutely added to, or absolutely taken away from, existence in general. Let us make the experiment. Let us form to ourselves a concept—an image of the universe. Now, we are unable to think, that the quantity of existence, of which the universe is the conceived sum, can either be amplified or diminished. We are able to conceive, indeed, the creation of a world; this in fact

rather from the identity of Causation and Effectuation is solved on this theory, and on this theory alone, it would be out of bounds here to explain. I may notice, however, that the whole difficulty is developed by *Ænesidemus*, in *Sextus Empiricus*; and that those who have recognised it in modern times, seem to have been wholly unaware of the more ingenious speculation of the ancient sceptic.

as easily as the creation of an atom. But what is our thought of creation? It is not a thought of the mere springing of nothing into something. On the contrary, creation is conceived, and is by us conceivable, only as the evolution of existence from possibility into actuality, by the fiat of the Deity.* Let us place ourselves in imagination at its very crisis. Now, can we construe it to thought, that, the moment after the universe flashed into material reality, into manifested being, there was a larger complement of existence in the universe and its author together than, the moment before, there subsisted in the Deity alone? This we are unable to imagine. And what is true of our concept of creation, holds of our concept of annihilation. We can think no real annihilation,—no absolute sinking of something into nothing. But, as creation is cogitable by us, only as a putting forth of Divine power, so is annihilation by us only conceivable, as a withdrawal of that same power. All that is now *actually* existent in the universe, this we think and must think, as having, prior to creation, *virtually* existed in the creator; and in imagining the universe to be annihilated, we can only conceive this, as the retraction by the Deity of an overt energy into latent power.—In short, it is impossible for the human mind to think what it thinks existent, lapsing into absolute non-existence, either in time past or in time future.

Our inability to think, what we have once conceived existent *in Time*, as in time becoming non-existent, corresponds with our inability to think, what we have conceived existent *in Space*, as in space becoming non-existent. We cannot realise it to thought, that a thing should be extruded, either from the one quantity or from the other. Hence, under extension, the law of *Ultimate Incompressibility*; under protension, the law of *Cause and Effect*.

I have hitherto spoken only of one inconceivable pole of the conditioned, in its application to existence in time,—of the *absolute* extreme, as absolute commencement and absolute termination. The counter or *infinite* extreme, as infinite regress or non-commencement, and infinite progress or non-termination, is equally unthinkable. With this latter we have, however, at present

* The creation à Nihilo means only: that the universe, when created, was not merely put into form, an original chaos, or complement of brute matter, having preceded a plastic energy of intelligence; but, that the universe was called into actuality from potential existence by the Divine fiat. The Divine fiat therefore was the proximate cause of the creation; and the Deity containing the cause, contained, potentially, the effect.

nothing to do. Indeed, as not obtrusive, the Infinite figures far less in the theatre of mind, and exerts a far inferior influence in the modification of thought, than the Absolute. It is, in fact, both distant and delitescens; and in place of meeting us at every turn, it requires some exertion on our part to seek it out. It is the former and more obtrusive extreme,—it is the Absolute alone which constitutes and explains the mental manifestation of the causal judgment. An object is presented to our observation which has phenomenally begun to be. But we cannot construe it to thought, that the object, that is, *this determinate complement of existence*, had really no being at any past moment; because, in that case, once thinking it as existent, we should again think it as non-existent, which is for us impossible. What then can we—must we do? That the phenomenon presented to us, did, *as a phenomenon*, begin to be,—this we know by experience; but that the elements, the constituents of its existence only began, when the phenomenon which they make up came into manifested being,—this we are wholly unable to think. In these circumstances how do we proceed? There is for us only one possible way. We are compelled to believe, that the object, (that is the certain *quale* and *quantum* of being, whose *phenomenal* rise into existence we have witnessed, did *really* exist, prior to this rise, under other forms; (and by *form*, be it observed, I mean any mode of existence, conceivable by us or not.) But to say, that a thing previously existed under different forms, is only to say, in other words, that *a thing had causes*. (It would be here out of place, to refute the error of philosophers, in supposing that anything can have a *single* cause;—meaning always by a cause that without which the effect would not have been. I speak of course only of second causes, for of the Divine causation we can pretend to no conception).

I must, however, now cursorily observe, that nothing can be more erroneous in itself, or in its consequences more fertile in delusion, than the common doctrine, that the causal judgment is elicited, only when we apprehend objects in consecution, and uniform consecution. No doubt, the observation of such succession prompts and enables us to assign particular causes to particular effects. But this assignation ought to be carefully distinguished from the judgment of causality, absolutely. This consists, not in the empirical and contingent attribution of this phenomenon, as cause, to that phenomenon, as effect; but in the *universal necessity* of which we are conscious, to think causes for every event,

whether that event stand isolated by itself, and be by us referable to no other, or whether it be one in a series of successive phenomena, which, as it were, spontaneously arrange themselves under the relation of effect and cause. Of no phenomenon, as observed, need we think *the* cause; but of every phenomenon must we think *a* cause. The former we *may* learn, through a process of induction and generalisation; the latter we *must* always and at once admit, constrained by the Condition of Relativity. On this, not sunken, rock, Dr Brown and others have been shipwrecked.

The preceding doctrine of Causality seems to me the one preferable, for the following among other reasons.

In the *first* place, to explain the phenomenon of the causal judgment, it postulates no new, no extraordinary, no express principle. It does not even proceed on the assumption of a *positive power*; for while it shews, that the phenomenon in question is only one of a class, it assigns, as their *common cause*, only a *negative impotence*. In this respect, it stands advantageously contrasted with the one other theory which saves the phenomenon, but which saves it, only on the hypothesis of a special principle, expressly devised to account for this phenomenon alone. But nature never works by more, and more complex, instruments than are necessary;—*μᾶλλον περιστάς*; and to excogitate a *particular force*, to perform what can be better explained on the ground of a *general imbecillity*, is contrary to every rule of philosophising.

But, in the *second* place, if there be postulated an express and positive affirmation of intelligence, to account for the mental deliverance,—that *existence cannot absolutely commence*; we must equally postulate a counter affirmation of intelligence, positive and express, to explain the counter mental deliverance,—that *existence cannot infinitely not commence*. The one necessity of mind is equally strong as the other; and, if the one be a positive datum, an express testimony of intelligence, so likewise must be the other. But they are contradictories; and, as contradictories, they cannot both be true. On such a theory, therefore, the root of our nature is a lie.—By the doctrine, on the contrary, which I propose, these contradictory phenomena are carried up into the common principle of a limitation of our faculties. Intelligence is shown to be feeble, but not false; our nature is, thus, not a lie, nor the author of our nature a deceiver.

In the *third* place, this simpler and easier doctrine, avoids a

most serious inconvenience which attaches to the more difficult and complex. It is this. To suppose a positive and special principle of causality, is to suppose that there is expressly revealed to us, through intelligence, an affirmation of the fact, that there exists no free causation; that is, that *there is no cause which is not itself merely an effect*, existence being only a series of determined antecedents and determined consequents. But this is an assertion of Fatalism. Such, however, many of the partisans of that doctrine will not admit. An affirmation of absolute necessity is, they are aware, virtually the negation of a moral universe, consequently of the moral governor of a moral universe; in a word, Atheism. Fatalism and Atheism are, indeed, convertible terms. The only valid arguments for the existence of a God, and for the immortality of the human soul, rest on the ground of man's moral nature; consequently, if that moral nature be annihilated, which in any scheme of thoroughgoing necessity it is, every conclusion established on such a nature, is annihilated likewise. Aware of this, some of those who make the judgment of causality a positive dictate of intelligence, find themselves compelled, in order to escape from the consequences of their doctrine, to deny that this dictate, though universal in its deliverance, should be allowed to hold universally true; and accordingly, they would exempt from it the facts of volition. Will, they hold to be a free cause, a cause which is not an effect; in other words, they attribute to will the power of absolute origination. But here their own doctrine of causality is too strong for them. They say, that it is unconditionally promulgated, as an express and positive law of intelligence, that every origination is an apparent only, not a real, commencement. Now to exempt certain phenomena from this universal law, for the sake of our moral consciousness, cannot validly be done.—For, 1°, this would be, as observed, an admission that the mind is a complement of contradictory revelations. If mendacity be admitted of some of our mental dictates, we cannot vindicate veracity to any. If one be delusive, so may all. “Falsus in uno, falsus in omnibus.” Absolute scepticism is here the legitimate conclusion.—But, 2°, waiving this conclusion, what right have we, on this doctrine, to subordinate the unexclusive affirmation of causality to our consciousness of moral liberty,—what right have we, for the interest of the latter, to derogate from the universality of the former? We have none. If both be equally

positive, we are not entitled to sacrifice to the other the alternative, which our wishes prompt us to abandon.

But the doctrine which I propose is not obnoxious to these objections. It does not maintain, that the judgment of causality is dependent on a *power* of the mind, imposing, as necessary in thought, what is necessary in the universe of existence. It does not, at once, universally affirm and specially deny; include without exception and yet except. On the contrary, it resolves this judgment into a mere mental *impotence*,—an impotence to conceive either of two contradictories. And as the *one* or the *other* of contradictories must be true, whilst both cannot; it proves, that there is no ground for inferring a certain fact to be impossible, merely from *our inability to conceive its possibility*. At the same time, if the causal judgment be not an express affirmation of mind, but only an incapacity of thinking the opposite; it follows, that such a negative judgment cannot counterbalance the express affirmative, the unconditional testimony, of consciousness,—that we are, though we know not how, the true and responsible authors of our actions, nor merely the worthless links in an adamant series of effects and causes. It appears to me, that it is only on such a doctrine, that we can philosophically vindicate the liberty of the human will, that we can rationally assert to man—“*fatis avolsa voluntas.*” *How* the will can possibly be free, must remain to us, under the present limitation of our faculties, wholly incomprehensible. We are unable to conceive an absolute commencement; we cannot, therefore, conceive a free volition. A determination by motives cannot, to our understanding, escape from necessitation. Nay, were we even to admit as true, what we cannot think as possible, still the doctrine of a motiveless volition would be only casualism; and the free acts of an indifferent, are, morally and rationally, as worthless as the pre-ordered passions of a determined, will. *How*, therefore, I repeat, moral liberty is possible in man or God, we are utterly unable speculatively to understand. But practically, the *fact*, that we are free, is given to us in the consciousness of an uncompromising law of duty, in the consciousness of our moral accountability; and this fact of liberty cannot be redargued on the ground that it is incomprehensible, for the philosophy of the Conditioned proves, against the necessitarian, that things there are, which *may*, nay *must* be true, of which the understanding is wholly unable to construe to itself the possibility.

But this philosophy is not only competent to *defend* the fact of our moral liberty, possible though inconceivable, against the assault of the fatalist; it *retorts* against himself the very objection of incomprehensibility by which the fatalist had thought to triumph over the libertarian. It shews, that the scheme of freedom is not more inconceivable than the scheme of necessity. For whilst fatalism is a recoil from the more obtrusive inconceivability of an *absolute* commencement, on the fact of which commencement the doctrine of liberty proceeds; the fatalist is shewn to overlook the equal, but less obtrusive, inconceivability of an *infinite* non-commencement, on the assertion of which non-commencement his own doctrine of necessity must ultimately rest. As equally unthinkable, the two counter, the two one-sided, schemes are thus theoretically balanced. But practically, our consciousness of the moral law, which, without a moral liberty in man, would be a mendacious imperative, gives a decisive preponderance to the doctrine of freedom over the doctrine of fate. We are free in act, if we are accountable for our actions.

Such (*φωσφαιρα συστοιχειν*) are the hints of an undeveloped philosophy, which, I am confident, is founded upon truth. To this confidence I have come, not merely through the convictions of my own consciousness, but by finding in this system a centre and conciliation for the most opposite of philosophical opinions. Above all, however, I am confirmed in my belief, by the harmony between the doctrines of this philosophy, and those of revealed truth. "Credo equidem, nec vana fides." The philosophy of the Conditioned is indeed preeminently a discipline of humility; a "learned ignorance," directly opposed to the false "knowledge which puffeth up." I may indeed say with St Chrysostom:—"The foundation of our philosophy is Humility;"* (while St Anstin declares "Humility to be the beginning, the middle, and the end of Christian precept.")† For this philosophy is professedly a scientific demonstration of the impossibility of that "wisdom in high matters" which the Apostle prohibits us even to attempt; and it proposes, from the limitation of the human powers, from our impotence to comprehend what, however, we must admit, to shew articulately why the "secret things of God" cannot but be to man "past finding out." Humility thus becomes the cardinal virtue, not only of revelation but of reason.—This scheme proves moreover, that no difficulty emerges in theo-

* Homil. de Perf. Evang.

† Ad Dioscorum; Epist. 118.

logy, which had not previously emerged in philosophy ; that, in fact, if the divine do not transcend what it has pleased the Deity to reveal, do not wilfully identify the doctrine of God's word with some arrogant extreme of human speculation, philosophy will be found the most useful auxiliary of theology. For a word of false, and pestilent, and presumptuous reasoning, by which philosophy and theology are now equally discredited, would be at once abolished, in the recognition of this rule of prudent nescience ; nor could it longer be too justly said of the code of consciousness, as by reformed divines it has been painfully acknowledged of the Bible :—

“ This is the book, where each his dogma seeks ;
And this the book, where each his dogma finds.”

It was in this view that Origen “ absolutely deemed that no one, without philosophy, could be truly pious towards the common Lord of all ;” * and as “ the Magus of the North ” observes :—“ An ignorance in divine matters maketh proud ; whereas the more that we advance in the science of salvation, the more humble do we become.” †—Specially ; in its doctrine of Causality this philosophy brings us back from the aberrations of modern theology, to the truth and simplicity of the more ancient church. It is here shewn to be as irrational as irreligious, on the ground of human understanding, to deny, either, on the one hand, the foreknowledge, predestination, and free grace of God, or, on the other, the free will of man ; that we should believe both, and both in unison, though unable to comprehend either, even apart. This philosophy proclaims with *St Augustin*, and Augustin in his maturist writings :—“ If there be not free grace in God, how can He save the world ; and if there be not free will in man, how can the world by God be judged ?” ‡ Or, as the same doctrine is perhaps expressed even better by *St Bernard* :—“ Abolish free will, and there is nothing to be saved ; abolish free grace, and there is nothing wherewithal to save.” § *St Austin* repeatedly declares, the conciliation of the foreknowledge, predestination, and free grace of God with the free will of man, to be “ a most difficult question, intelligible only to a few.” Had he denounced it as a fruitless question, and (to understanding) soluble by none, the world might have been spared a large library of acrimonious and resultless disputation. This conciliation is of the

* *Gregorii Pontici Panegyri. ad Orig.* † *Haman's Schriften*, I. 491.

‡ *Ad Valentinum ; Epist.* 214.

§ *De Gratia et Libero Arbitrio*, c. I.

things to be believed, not understood. The futile attempts to harmonise these antilogies, by human reasoning to human understanding, have originated conflictive systems of theology, divided the Church, and, as far as possible, dishonoured religion.

"Vain wisdom all and false philosophy!"

It must however be admitted, that confessions of the total inability of man to conceive the union, of what he should believe united, are to be found; and they are found, not, perhaps, less frequently, and certainly in more explicit terms among Catholic than among Protestant theologians.

Of the former, I shall adduce only one testimony, by a prince of the Church; and it is the conclusion of what, though wholly overlooked, appears to me as the ablest and truest criticism of the many fruitless, if not futile, attempts at conciliating "the ways of God" to the understanding of man, in the great articles of divine foreknowledge and predestination (which are both embarrassed by the self same difficulties,) and human free-will. It is the testimony of *Cardinal Cajetan*, and from his commentary on the *Summa Theologiæ* of Aquinas. The criticism itself I may take another opportunity of illustrating.

"Thus elevating our mental eye to a loftier range, [we may suppose that] God, from an excellence supernally transcending human thought, so foresees events and things, that from his providence something higher follows than evitability or inevitability, and that his passive prevision of the event does not determine the alternative of either combination. And can we do so, the Intellect is quieted; not by the evidence of the truth known, but by the inaccessible height of the truth concealed. And this to my poor Intellect seems satisfactory enough, both for the reason above stated, and because, as Saint Gregory expresses it, 'The man has a low opinion of God, who believes of Him only so much as can be measured by human understanding.' Not that we should deny aught, that we have by knowledge or by faith of the immutability, actuality, certainty, universality, and similar attributes of God; but I suspect that *there is something here lying hid*, either as regards the relation between the Deity and event foreseen, or as regards the connection between the event itself and its prevision. Thus, reflecting that the intelligence of man [in such matters,] is as the eye of the owl [in the blaze of day, (he refers to Aristotle,)] I find its repose in ignorance alone. For it is more consistent, both with Catholic faith and with philosophy, to confess our blindness, than to assert, as things evident, what afford no tranquillity to the intellect; for evidence is tranquillising. Not that I would, therefore, accuse all the doctors of presumption; because, stammering, as they could, they have all intended to insinuate, with God's immutability, the supreme and eternal efficiency of His intellect, and will, and power,—through the infallible relation between the Divine election and whatever comes to pass. Nothing of all this is opposed to the foresaid suspicion,—that *something too*

deep for us lies hid herein. And assuredly, if it were thus promulgated, no Christian would err in the matter of Predestination, as no one errs in the doctrine of the Trinity; * because of the Trinity the truth is declared orally and in writing,—that this is a mystery concealed from human intellect, and to which faith alone is competent. Indeed, the best and most wholesome counsel in this matter is:—To begin with those things which we certainly know, and have experience of in ourselves; to wit, that all proceeding from our free-will may or may not be performed by us, and therefore are we amenable to punishment or reward; but how, this being saved, there shall be saved the providence, predestination, &c., of God,—to believe what holy mother Church-believes. For it is written, ‘*Altiora te ne quassieris*’ (‘Be not wise in things above thee’); there being many things revealed to man, above thy human comprehension. And this is one of those.” (Pars I. qu. xxii., art. 4.)

Averments to a similar effect, might be adduced from the writings of *Calvin*; and, certainly, nothing can be conceived more contrary to the doctrine of that great divine, than what has latterly been promulgated as Calvinism, (and, in so far as I know, without reclamation,) in our Calvinistic Church of Scotland. For it has been here promulgated, as the dogma of this Church, (though in the face of its Confession, as in the face of the Bible,) by pious and distinguished theologians, that man has no will, agency, moral personality of his own, God being the only real agent in every apparent act of his creatures;—in short, (though quite the opposite was intended,) that the theological scheme of the absolute decrees implies fatalism, pantheism, the negation of a moral governor, as of a moral world. For the premises, arbitrarily assumed, are atheistic; the conclusion, illogically drawn, is Christian. Against such a view of Calvin’s doctrine, and of Scottish orthodoxy, I for one must humbly though solemnly protest, as, (to speak mildly,) not only false in philosophy, but heretical,—ignorant,—suicidal in theology.†

* This was written before 1507; consequently long before Servetus and Campanus had introduced their unitarian heresies.

† The following are fragments of a fuller discussion of the doctrine of Causality:—

(1853.) *The Law of Parcimony* (as the rule ought to be distinctively called), the most important maxim in regulation of philosophical procedure where it is necessary to resort to an hypothesis, has, though always virtually in force, never perhaps been adequately enounced. It should be thus expressed:—*Neither more, nor more onerous, causes are to be assumed, than are necessary to account for the phenomena.*—This rule thus falls naturally into two parts; in the one, *more*, in the other *more onerous*, causes are prohibited. Each has to be considered by itself.

1.)—"Not MORE causes," &c.—This phasis of the law has been long fully promulgated. Every condition of any consequence has, indeed, been articulately laid down by Aristotle; and subsequent philosophers, among whom Galeu is conspicuous, have only repeated what was so clearly and so frequently inculcated by the Stagirite. Not only is it a maxim of his philosophy, that God and Nature never operate without effect, (οὐδὲν μάτην, οὐδὲν ἰλλαιπύς, ποιεῖν); they never operate superfluously (μηδὲν περιεργον—περιττὸς—ἀεργῶς); but always through one rather than through a plurality of means, (καθ' ἓν, μᾶλλον ἢ κατὰ πολλά.) The Scholastic axioms:—"Principia non sunt cumulanda,"—"Frustra fit per plura quod fieri potest per pauciora,"—"Natura horret superfluum,"—these simply embody Aristotle's dicta; and the same, with a modification, is manifest of the Novaculum Nominalium or Occam's Razor,—"*Entia non sunt multiplicanda præter necessitatem.*" Newton's first and principal rule of philosophising, in so far as it is accurately expressed, in like manner, simply repeats Aristotle's law:—"Effectuum naturalium causæ, non plures sunt admittendæ quàm quæ, et veræ sunt, et effectibus explicandis sufficiunt."—Thus the phenomenon of a stone ascending from the earth requires for its explanation the assumption of a special force; but it would be absurd hypothetically to call in the agency of a special force—a force apart from gravitation, to account for the phenomenon of its re-descent.

This part of the Law of Parcimony is adverse to the doctrine which assumes, as a separate Intellectual regulative, what is called "the Principle of Causality," that every event must have its cause. For here there is postulated a new and special principle, while it is not shown that the phenomenon in question cannot be explained by the old and common; while, as this is only silently presumed, if the presumption be redargued, the hypothesis at once falls as superfluous. And that it is superfluous, there can be no reasonable doubt. For while the separate "Principle of Causality" is excogitated to explain,—why it is that we *must* prefix in thought a cause to every change of which we think; it cannot be denied, however marvellously overlooked, that this same mental necessity is involved in the general inability we find, of construing positively to thought any thing *irrelative*, and specially, of thinking any thing *absolutely to commence*. This general inability explains, among sundry other mental phenomena, the Causal judgment; and it must be left at work, howbeit a new canon is called in to perform this part of its multiform operations. As new and express, this principle is therefore pleonastic, otiose, useless; and its assumption, so soon as the old is signalled, becomes philosophically absurd.

But what here carries the absurdity to a climax, is, that those who call in the separate "Principle of Causality," find, that if unconditionally allowed, their hypothetical principle would, in fact, disprove the moral nature of man. Accordingly, some, in obedience to their hypothesis, surrender themselves to a hopeless fatalism; while others, though they accord an unlimited authority over the world of matter to their "Principle of Causality," arbitrarily withdraw from its legislation the world of mind. They postulate an unlimited law, and yet that law they will not allow, without limitation, to legislate. In order to save the liberty of man, they would exempt the actions of the Will from the causal series: though unable to make this liberty conceivable; or to show either, *why* it is unthinkable, or *how*,

though unthinkable, it is not therefore impossible. On the contrary, they outrage the authority of our primary beliefs; Reason, Intelligence, ultimate Consciousness is held, and that within its legitimate sphere, to stand in contradiction with itself; the mind is displayed, even in its highest faculties, as a complexus of insoluble antilogies.—What is this but an undeveloped scheme of absolute scepticism?

In the doctrine of the Conditioned all is reversed. There, thought is not displayed as fundamentally repugnant with itself. Within its prescribed domain, it is shewn to be consistent; and that it only becomes self-contradictory, when transcending the sphere of those limits which discriminate from each other its legitimate and its illegitimate exercise. The antilogies in thought are, indeed, all equally illegal; and as none of them can prove, so none of them can disprove, any thing. And as these antilogies result only from the transcendence of thought; instead of man "reasoning but to err," reason, within its bounds and laws, may be presumed—impeccable;

"Nam neque decipitur Ratio nec decipit unquam,"

in the words of Manilius. Liberty is thus shewn to be inconceivable, but not more than its contradictory, Necessity; yet, though inconceivable, Liberty is shewn also not to be impossible. The credibility of Consciousness to our moral responsibility, as an incomprehensible fact, is thus established; and we obtain through a strictly scientific demonstration,—"*Fatis avolsa Voluntas*,"

II.)—"Not more onerous causes," &c.—This condition, though necessarily involved in the Law of Parsimony, has not been articulately expressed in the enouncements of it hitherto promulgated. On the special ground of this condition, the theory now proposed is also entitled to a decisive preference. It is comparatively cheap.

1.)—In the first place, it only supposes a *general*,—a *common*,—an *already established*, principle; and the mental phenomenon of the causal judgment is only one out of a variety of other judgments which it necessitates. "The Principle of Causality," in the counter theory is, on the other hand, *special* and *express*; it is supposed to determine this judgment, and this judgment alone. Accordingly, it is comparatively onerous or expensive.

2.)—In the second place, the doctrine of the Conditioned explains the necessity of the causal judgment by a *negative impotence*; whereas the "Principle of Causality," in the opposite doctrine, is a *positive power*. The one theory founds upon a *known and natural finitude* of mind—an inability to think an absolute commencement; the other, overlooking this recognised or recognisable limitation, postulates an *unknown inspiration of knowledge*—in fact, a revelation, that whatever begins to be must originate from some existence antecedent. The one hypothesis is thus, again, comparatively cheap, the other comparatively dear.

3.)—In the third place, the principle assumed in the doctrine of the Conditioned is *not itself hypothetical*; that is, this doctrine adopts, as a medium of explanation, what is already a proved reality, an established existence, an acknowledged fact. All is different in the counter theory. Here "the Principle of Causality" is *itself hypothetical*. It is not otherwise known to exist, and to exist independently of what it is only created—only called into

being, in order to explain. It is devised to render conceivable the fact of the *necessity* of the causal judgment; and *this fact, again, affords the only ground for the hypothesis of its reality*. We imagine it, hypothetically, to be, in order, that we may again hypothetically employ this hypothetical entity.—If we correct the inaccuracy of Newton's expression, it becomes probable, and, if we take into account the analogy of his practice, it becomes almost certain, that he meant to denounce the postulation of hypothetical facts, as media of hypothetical explanation. The word "*veræ*" must mean only causes *themselves real*, facts otherwise known to exist: for to suppose it to mean *true*, that is, *the true causes of the effects*;—this would be both a futile begging of the question, and would not distinguish his own hypothesis of the sidereal movements from the self-styled romances of Descartes and the lawless conjectures of preceding theorists. In fact, there is a curious conformity, if I may venture to say so, between Newton's procedure and our own. Gravity is the great constitutive principle in the world of matter; whilst Causation is the highest constitutive, and Causality the highest regulative, principle in the worlds both of matter and of mind. In elevating, therefore, Gravitation from the earth,—to the moon,—to the solar system,—to the stellar universe at large,—in elevating Gravitation to a common law of matter, Newton extended a principle, whose reality was recognised in *one*, to *every* part, of the physical creation; and thus superseded a multitude of supposititious causes, variously excogitated to account for an apparent variety of phenomena. And it was precisely on the ground, that, while equally saving the phenomena, the Newtonian hypothesis was more parcimonious, and less hypothetical, than previous astronomical theories, that, at first at least, it found favour and acceptance. On the other hand, we would draw forth the hitherto neglected modifications of the mental impotence of the Conditioned, and by reducing their diversity to *unity*, raise it, from a verbal collection of partial, obscure and heterogeneous limitations, to a really one generic, manifest, thoroughgoing and simple law of thought; for it is by this deliquescent principle,—deliquescent, but whose truth, oneness and universality cannot, when fairly stated, fairly be disallowed,—that we would explain a multiform plurality of phenomena, for each of which, at present, a separate power, of worse than problematical existence, is hypothetically postulated, hypothetically to account. It is, I say, precisely on the ground,—that the *single* assumption of the Conditioned, (a *known impotence*, explaining, as a *common* principle, the causal and sundry other necessary judgments), is a *cheaper* and *less hypothetical* assumption, than the hypothesis of an unknown power, expressly excogitated to account for the causal judgment, and the causal judgment alone;—it is precisely, on this general ground, that there is vindicated, to this explanatory doctrine, the claim of a superior preliminary probability.

Such are the abstract, or preliminary grounds on which this opinion, merely as an hypothesis, appears entitled to preference. But, apart from these, this hypothesis alone accounts for the remarkable phenomenon which the question touching the *Liberty* of the Will—touching the *Necessity* of Human Actions, has in all ages and in all relations exhibited. This phenomenon is the *exact equilibrium* in which the controversy has continued; and

it has been waged in Metaphysics, in Morals, in Theology, from the origin of speculation to the present hour, with unabated zeal, but always with undecided success. For, as Hume observes,—“The question of *Liberty* and *Necessity* is the most contentions of metaphysics, the most contentions of science.”

Some three centuries ago, (c. 1560,) the famous Bernardin Ochinus wrote, and addressed to Queen Elizabeth, his “*Labyrinth; that is, a disquisition touching the Freedom or Bondage of the Human Will, and the Foreknowledge, Predestination, Liberty of God.*” He discusses the conjunct questions with great acuteness, from every point of view; and his conclusion is,—“that he thanks God for having herein vouchsafed to him the knowledge of a Learned Ignorance.” The only outlet from the mazes is, he says, “to know, that outlet there is and can be—none.”

A century later than Ochino, and probably with an eye to his *Labyrinths* or *Mazes*, Milton represents the fallen angels engaged upon the problem:—

“Others apart sat on a hill retir’d,
In thoughts more elevate, and reason’d high
Of providence, foreknowledge, will, and fate,
Fixt fate, free will, foreknowledge absolute,
And found no end, in wand’ring mazes lost.”

The same polemic has had the same result in the most recent speculation. The question now, as heretofore, divides the schools of philosophy, divides the sects of religion. As I have elsewhere observed, “the champions of the opposite doctrines are at once resistless in assault, and impotent in defence. Each is hewn down, and appears to die under the home thrust of his adversary; but each, again, recovers life from the very death of his antagonist; and both, like the heroes of Valhalla, are ever ready in a twinkling to amuse themselves anew in the same bloodless and interminable conflict.” But,

“Quod genus hoc pugnæ, quæ victor victus uterque?”

Whence this impossibility of defeat, this impossibility of victory; and yet also this ceaseless impulse to renew the useless and never decided warfare? This phenomenon, if not absolutely singular, in respect to equilibrium, is, in other respects, ohtrusively remarkable. I say, not absolutely singular; for I have in recollection the counter impossibility of thinking body, composed either of parts extended or unextended,—the balanced insolubilities of Atomism and of Dynamism,—“The Labyrinth,” as it was called in the Schools, (“*Labyrinthus, sive de Compositione Continui.*”) But if not altogether singular in theory, this phenomenon is singularly interesting in practice, and on that account pre-eminently demands an explanation; the doctrine, therefore, which best accounts for it, is entitled not only to preference, but to acceptance and favour. And herein the doctrine of the Conditioned stands alone; for this doctrine can supply not merely the only satisfactory solution, but the only solution of the problem at all.

Previous philosophers have all held, that this conflict and this equilibrium of intelligence, in the question touching the Liberty or Necessity of human actions, emerges from the *due exercise of thought, within its legitimate boundaries*; consequently that this antilogy results from the natural, inevitable, and insoluble antagonism of reason or intelligence with itself. Those philosophers who embraced the alternative of *Necessity*, virtually extenuated, as

delusive, those ultimate data of intelligence, which attribute to man, as the author or master of his actions, a moral agency, responsibility, liberty,—an undetermined freedom to initiate an action. Those philosophers, again, who embraced the alternative of *Liberty*, virtually extenuated, as delusive, in so far as our volitions are concerned, that necessity of intelligence, which constrains us to seek the commencement of every event, external or internal, in some antecedent, itself determined by a higher antecedent. The *one* class, did not attempt to render comprehensible an *infinite* series of relative or determined commencements; the *other* class, did not attempt to render comprehensible an *absolute* or undetermined initiative. *Both* implicitly charged reason with promulgating, in the last resort, contradictory facts,—facts which could not both be true, and of which neither could be conceived as possible,—facts consequently, which were equally entitled to acceptance, and which proved, when the implicit was unfolded into the explicit, that intelligence itself was unworthy of credit,—as in effect, a source of delusion and inexplicable error.—“Have we not eaten the fruit of lies?”

One philosopher however stands apart, that is *Kant*. His doctrine, in this respect, is peculiar; it is not one sided and inexplicit, nor is its application only inferential. He holds, that the *phenomenal* world must be distinguished from the *noumenal*, or world of *Things in themselves*: that *Space* and *Time* are mental forms under which alone we perceive external things, as phenomena, but (though in this he varies) *Space* and *Time* have no reality, out of us, with *Things in themselves*, or as *Noumena* (*δυνάμεις ἐν ταῖς*). They have a subjective, but not an objective validity. In accordance with this doctrine, he explicitly declares Reason (or Intelligence) to be, essentially and of its own nature, delusive; and, thus more overtly than the others, he supersedes (what constitutes the fundamental principle, and affords the differential peculiarity of the doctrine of the Conditioned,) the distinction between Intelligence, *within* its legitimate sphere of operation, impeccable, and Intelligence, *beyond* that sphere, affording (by abuse) the occasions of error. Kant thus fully vindicates his right to the title of “*the All-be-crushing*,” (*der Alleszermalmender*.) The intellectual Samson, he casts down not only Metaphysic and Rational Psychology, but Philosophy itself; and the Kantian doctrines are among the ruins. - - - - -

(B.) PHILOSOPHICAL TESTIMONIES
TO THE LIMITATION OF OUR KNOWLEDGE, FROM
THE LIMITATION OF OUR FACULTIES.

THESE, which might be indefinitely multiplied, I shall arrange under *three* heads. I omit the Sceptics, adducing only specimens from the others.

I. *Testimonies to the general fact, that the highest Knowledge is a consciousness of Ignorance.*

There are two sorts of *Ignorance*: we philosophise to escape ignorance, and the consummation of our philosophy is ignorance; we start from the one, we repose in the other; they are the goals from which, and to which, we tend; and the pursuit of knowledge is but a course between two ignorances, as human life is itself only a wayfaring from grave to grave.

"Τίς ᾔστος;—Ἐκ τύμωσεν θεοῶν, ἐπὶ τύμωσεν ἀνθρώπων."

We never can emerge from ignorance. If, as living creatures,

"we are such stuff

As dreams are made of, and our little life

Is rounded with a sleep;"

so, as cognisant intelligences, our dream of knowledge is a little light, rounded with a darkness. One mortal, one nation or generation of mortals, may flare a flambeau, and another twinkle a taper; still the sphere of human enlightenment is at best a point, compared with the boundless universe of night surrounding it. Science is a drop; nescience is the ocean in which that drop is whelmed.

The highest reach of human science is indeed the scientific recognition of human ignorance; "Qui nescit ignorare, ignorat scire." This "learned ignorance" is the rational conviction by the human mind of its inability to transcend certain limits; it is the knowledge of ourselves,—the science of man. This is accomplished by a demonstration of the disproportion between what is to be known and our faculties of knowing,—the disproportion, to wit, between the infinite and the finite. In fact, the recognition of human ignorance, is not only the one highest, but the one true, knowledge; and its first-fruit, as has been said, is—*humility*. Simple nescience is not proud; consummated science is positively humble. For this knowledge it is not, which "puffeth up;" but its opposite.

the conceit of false knowledge,—the conceit, in truth, as the Apostle notices, (I. Cor. viii. 2) of an ignorance of the very nature of knowledge:

“Nam nesciens quid scire sit,
Te scire cuncta jactitas.”

But as our knowlege stands to Ignorance, so stands it also to *Doubt*. Doubt is the beginning and the end of our efforts to know; for as it is true,—“*Alte dubitat qui altius credit*,” so it is likewise true,—“*Quo magis quærimus magis dubitamus*.”—Doubt is even divinely enjoined on us as a duty. For the command of the Apostle,—“*Prove (test) all things*,” involves the correlative injunction,—Doubt all things. And Bacon (Of Church Controversies) truly says:—“There cannot be a ‘*quod bonum est tenete*,’ without an ‘*omnia probate*’ going before.”

The grand result of human wisdom, is thus only a consciousness that *what we know is as nothing to what we know not*, (“*Quantum est quod nescimus!*”)—an articulate confession, in fact, by our natural reason, of the truth declared in revelation,—that “*now* we see through a glass, darkly.”

1.—DEMOCRITUS, (as reported by Aristotle, Cicero, Seneca, Sextus Empiricus, &c.):—“We know nothing in its cause [or on a conjectural reading—in truth]; for truth lies hid from us in depth and distance.”

2.—SOCRATES, (as we learn from Plato, Xenophon, Cicero, &c.) was declared by the Delphic oracle the wisest of the Greeks; and why? Because he taught,—that all human knowlege is but a qualified ignorance.

3.—ARISTOTLE, (Metaphysica, L. ii., c. 1.):—“A theory of Truth, is partly easy, partly difficult. This is shewn by the fact,—that no one has been wholly successful, and no one wholly unsuccessful, in its acquisition; but, while each has had some report to make concerning nature, though the contributions, severally considered, are of little or no avail, the whole together make up a considerable amount. And if so it be, we may apply the proverb—‘Who can miss the gate?’ In this respect, a theory of Truth is easy.—But our inability to compass some Whole and Part, [or, to c. both W. and P.] may evince the difficulty of the inquiry; (Τὸ δ’ ἅπαν τι (or τ’) ἔχουσιν καὶ μέρος μὴ δύνασθαι, ἀλλὰ τὸ χαλεπὸν αὐτῆς.)—As difficulty, however, arises in two ways; [in this case] its cause may lie, not in things, [as the objects known,] but in us, [as the subjects knowing.] For as the eye of the bat holds to the light of day, so the intellect [νοῦς, which is, as it were, (Eth. Nic. i. 7) the eye] of our soul, holds to what in nature are of all most manifest.”*

* In now translating this passage for a more general purpose, I am strongly impressed with the opinion, that Aristotle had in view the special doctrine of the Conditioned. For it is not easy to see what he could mean

4.—SENECA, (De Beneficiis, L. vii., c. 1.):—"Involuta veritas in alto latet."—(Epistola, lxxxviii.):—"Plus scire velle quam sibi satis, intemperantiæ genus est. - - - Tota rerum natura umbra est, aut inanis, aut fallax. Non facile dixerim utrum magis irascar illis, qui nos nihil scire voluerunt, an illis, qui ne hoc quidem nobis reliquerunt, nihil scire."

5.—PLINY, (Historia Naturalis, L. ii., c. 32.):—"Omnia incerta ratione, et in naturæ majestate abdita."

6.—TERTULLIAN. (Adversus Hæreticos; N. iv.):—"Cedat curiositas fidei, cedat gloria salutis. Certe, aut non obstrepant, aut quiescant adversus regulam—*Nihil scire omnia scire est.*"—(De Anima, c. 1.):—"Quis revelabit quod Deus texit? Unde scitandum? Quare ignorare tutissimum est. Præstat enim per Deum nescire quia non revelaverit, quam per hominem scire quia ipse præsumpsit."

7.—ARNOBIUS. (Contra Gentes; L. ii.):—"Quæ nequeunt sciri, nescire nos confiteamur; neque ea vestigare curemus, quæ non posse comprehendere liquidissimum est."

8.—ST AUGUSTIN. (Ed. Benedict. t. v.—Sermo xxvii.):—"Melior est fidelis ignorantia, quam temeraria scientia. - - - Quæris tu rationem, ego expavescio altitudinem. ('O altitudo divitiarum sapientiæ et scientiæ Dei!') Tu ratiocinare, ego miror; tu disputa, ego credam; altitudinem video, ad profundum non pervenio. - - - Ille dicit, 'Inscrutabilia sunt judicia ejus;' et tu scrutari venisti? Ille dicit, 'Ininvestigabiles sunt viæ ejus;' et tu investigare venisti? Si inscrutabilia scrutari venisti, et ininvestigabilia investigare venisti; crede, jam peristi."—(Sermo xciii.):—"Quid inter nos agebatur? Tu dicebas, *Intelligam, ut credam*; ego dicebam, *Ut intelligas, crede*. Nata est controversia, veniamus ad judicem, judicet Propheta, immo vero Deus judicet per Prophetam. Ambo taceamus. Quid ambo dixerimus, auditum est. Intelligam, inquit, ut credam; Crede,

by saying, that "we are unable to have [compass, realise the notions of] Whole and Part," or of "some Whole and Part;" except to say, that we are unable to conceive (of space, or time, or degree,) a whole, however large, which is not conceivable as the part of a still greater whole, or a part, however small, which we may not always conceive as a whole, divisible into parts. But this would be implicitly the enunciation of a full doctrine of the Conditioned. Be this however as it may, Aristotle's commentators have been wholly unable to reach, even by a probable conjecture, his meaning in the text. Alexander gives six or seven possible interpretations, but all nothing to the point; whilst the other expositors whom I have had patience to look into, (as Philoponus, Averroes, Javellus, Fonseca, Suarez, Sonerus,) either avoid the sentence altogether, or show that they, and the authorities whom they quote, had no glimpse of a satisfactory interpretation. I have been unable to find (on a hurried search) in the able and truly learned "Essay on the Metaphysics of Aristotle" by M. Ravaisson, a consideration of the passage.

inquam, ut intelligas. Respondeat Propheta :—*‘ Nisi credideritis, non intelligetis.’* [Isaiah vii. 9, according to the Seventy.]—(Sermo cxvii.) :—*“ De Deo loquimur, quid mirum, si non comprehendis? Si enim comprehendis, non est Deus. Sit pia confessio ignorantiae magis quam temeraria professio scientiae. Adtingere aliquantam mente Deum, magna beatitudo est; comprehendere autem, omnino impossibile.”**—(Sermo clxv.) :—*“ Ideo multi de isto profuado quærentes reddere rationem, in fabulas vaaitatis abieruat.”* [Compare Sermo cxvi. c. i.]—(Sermo ccci. e. 4) :—*“ Confessio ignorantiae, gradus est scientiae.”*—(Epistola cxc. vol. ii.) :—*“ Quæ nullo sensu carnis explorari possunt, et a nostra experientia longe remota sunt, atque in abditissimis naturæ finibus latent, non erubescendum est hominibus confiteri se nescire quod nescit, ne dum se scire meatitur, nunquam scire mereatur.”*—(T. ii.—Epistola cxvii.) :—*“ Magis eligo tantam ignorantiam confiteri, quam falsam scientiam profiteri.”*—Augustine, likewise, somewhere says :—*“ Deus scitur melius, quam ignoratur.”*

9.—ST CHRYSOSTOM. (Homilies on the Epistle to the Ephesians; Hom. xix. Ed. Benedict. t. xi. p. 140) :—*“ Nothing is wiser than ignorance in those matters, where they who proclaim that they know nothing, proclaim their surpassing wisdom; whilst those who busy themselves therein, are the most senseless of mankind.”*

10.—THEODORET. (Therapeutica, &c. Narrative of Greek Affections; Sermon 1) :—*“ The beginning of science is the science of nescience;”* or—*“ The principle of knowledge is the knowledge of ignorance.”*

11.—ST PETER CHRYSOLOGUE. (Sermones; Ser. li.) :—*“ Nolle omnia scire, summa scientiæ est.”*

12.—BOETHIUS. (De Consolatione Philosophiæ; l. v. pr. 5.)—Speaking of God's prescience of future contingents; this, he says, though inconceivable, should not be denied. *“ Quare in illius summi intelligentiæ cacæmia, si possamas, erigamur; illic enim ratio videbit quod in se nostra potest intueri. Id autem est, quoniam modo etiam quæ certos exitus non habent, certa tamen videant ac definita præoscant: neque id sit opinio, sed summi potius scientiæ nullis terminis iactata simplicitas.”*

13.—“THE ARABIAN SAGE.” (I translate this and the two following from Drusius and Gale) :—*“ A man is wise while in pursuit of wisdom; a fool, when he thinks it to be mastered.”*

14.—A RABBI :—*“ The wiser a man, the more ignorant does he feel; as the Preacher has it, [i. 18]—‘ To add science is to add sorrow.’”*

15.—A RABBI :—*“ Who knows nothing, and thinks that he knows some-*

* A century before Augustine, St Cyprian had said :—*“ We can only justly conceive God in recognising Him to be inconceivable.”* I cannot, however, at the moment, refer to the passage except from memory.

thing, his ignorance is twofold." * Like to I. Corinthians, viii. 2, "If any man think that he knoweth anything, he knoweth nothing yet as he ought to know." Compare also Maimonides On Idolatry, c. ii. § 4.

16.—PETRARCH. (De Contemptu Mundi; Dial. ii.) :—"Excute pectus tuum acriter; invenies enncta quæ nosti, si ad ignorata referantur, eam proportionem obtinere, quam collatus oceano, rivulus æstivis siccandis ardoribus: quamquam vel multa nosse, quid revelat?"

17. LAURENTIUS VALLA. (De Libertate Arbitrii.)—Valla terminates this acute dialogue on Human Liberty and Divine Predestination by a confession of his own inability to solve the question, and general exhortations to humility and diffidence.—"Nescimus hujus rei causam; quid refert? Fide stamus, non probabilitate rationum. Scire hoc, multum ad corroborationem fidei faceret?—plus humilitas. Ait Apostolus: '*Non alta sapientes, sed humilibus consentientes*' [Rom. xii. 16.]. Scientia divinorum utilis est?—utilior claritas. Dicit enim idem Apostolus: '*Scientia inflat, Charitas edificat*' [I. Cor. viii. 1.]. - - - Fugiamus, igitur, enpuditatem alta sapiendi, humilibus potius consentientes. Christiani namque hominis nihil magis interest, quam *sentire humiliter*. Hoc enim modo, magnificentius de Deo sentimus, unde scriptum est: '*Superbis Deus resistit, humilibus autem dat gratiam*' [Jae. iv. 6. et I. Pet. v. 5.].—Hanc ut adipisci possim, de ista questione, quod ad me attinet, amplius curiosus non ero, ne majestatem dei vestigans, obscurer a lumine."

18.—CARDINAL DE CUSA. (Opera ed. 1565. De Docta Ignorantia; I. l. c. 3, p. 3) :—"Quidditas ergo rerum, quæ est entium veritas, in sua puritate inattingibilis est; et per omnes Philosophos investigata, sed per neminem, uti est, reperta; et quanto in hac ignorantia profundius docti fuerimus, tanto magis ad ipsam accedemus veritatem."—(Ib. c. 17, p. 13) :—"Sublata igitur ab omnibus entibus participatione, remanet ipsa simplicissima entitas, quæ est essentia omnium entium, et non conspiciamus ipsam talem entitatem, nisi in doctissima ignorantia, quoniam cum omnia participantia entitatem ab animo removeo, nihil remanere videtur. Et propterea magnus Dionysius [Areopagita] dicit, intellectum Dei, magis accedere ad *nihil*, quam ad aliquid. Sacra ntem ignorantia me instruit, hoc quod intellectui *nihil* videtur, esse maximum incomprehensibile."—(Apologia Doctæ Ignorantiæ, p. 67.) :—"Augustinus ait :—'Denique potius ignorantia quam scientia attingi.' Ignorantia enim abiecit, intelligentia colligit; Docta vero Ignorantia omnes modos quibus accedi ad veritatem potest, unit. Ita eleganter dixit *Algazel* in sua Metaphysica, de Deo: 'Quod quisque scit per probationem necessariam,

* Literally:

"Te, tenebris jactum, ligat ignorantia duplex;
Scis nihil, et nescis te modo scire nihil."

Or, with reference to our German evolves of the Nothing into the Everything; and avoiding the positio debilis:

"Te, sophia insanum, terit insipientia triplex;
Nil sapis, et nil non te sapuisse sapis!"

impossibilitatem suam apprehendendi eum. Ipse sui est cognitor, et apprehensor; quoniam apprehendit, sciro ipsum a nullo posse comprehendi. Quisquis autem non potest apprehendere, et nescit necessario esse impossibile eum apprehendere, per probationem predictam, est ignorans Deum; et tales sunt omnes homines, exceptis dignis, et prophetis et sapientibus, qui sunt profundi in sapientia.* Hæc ille."—See also: De Beryllo, c. 36, p. 281; De Venatione Sapientiae, c. 12, p. 306; De Deo Abscondito, p. 338; &c. &c.*

19.—ÆNEAS SYLVIVS (Piccolomini, Pope Pius II. Rhetorica; L. ii.):—
"Cui plura nosse datum est, cum majora dubia sequuntur."

20.—PALINGENIUS (Zodiacus Vitæ; Virgo v. 181, sq.):

"Tunc mea Dux tandem pulcro sic incipit ore:—

Simia callicolum † risusque jocisque Deorum est

* So far, Cusa's doctrine coincides with what I consider to be the true precept of a "Learned Ignorance." But he goes farther: and we find his profession of negative Ignorance converted into an assumption of positive knowledge; his Nothing, presto, becoming everything: and contradictions, instead of standing an insuperable barrier to all intellectual cognition, employed in laying its foundation. In fact, I make no doubt that his speculations have originated the whole modern philosophy of the Absolute. For Giordano Bruno, as I can shew, was well acquainted with Cusa's writings; from these he borrowed his own celebrated theory, repeating even the language in which its doctrines were originally expressed. To Cusa, we can, indeed, articulately trace, word and thing, the recent philosophy of the Absolute. The term *Absolute* ("Absolutum"), in its precise and peculiar signification, he everywhere employs. The *Intellectual Intuition* ("Intuitio Intellectualis") he describes and names; nay, we find in him, even the process of Hegel's Dialectic. His works are, indeed, instead of the neglect to which they have been doomed, well deserving of attentive study in many relations. In Astronomy, before Copernicus, he had promulgated the true theory of the heavenly revolutions, with the corollary of a plurality of worlds; and in the science of Politics, he was the first perhaps to enounce the principles on which a Representative Constitution should be based. The Germans have, however, done no justice to their countryman. For Cusa's speculations have been most perfunctorily noticed by German historians of philosophy; and it is through Bruno that he seems to have exerted an influence on the Absolutist theories of the Empire.

† The comparison of man as an ape to God, is from Plato, who, while he repeatedly exhibits human beings as the jest of the immortals, somewhere says,—“The wisest man, if compared with God, will appear an ape.” Pope, who was well read in the modern Latin poets, especially of Italy, and even published from them a selection, in two volumes, abounds in manifest imitations of their thoughts, wholly unknown to his commentators. In his line,—

“And shew'd a Newton as we shew an ape,”

—he had probably this passage of Palingenius in his eye, and not Plato. Warburton and his other scholiasts are aware of no suggestion.

Tunc homo, quum temere ingenio confidit, et andet
 Abdita naturæ scrutari, arcanaque Divum,
 Cum re vera ejus crassa imbecillaque sit mens,
 Si posita ante pedes nescit, quo jure videbit
 Quæ Deus et natura sinu occultare profundo?
 Omnia se tamen arbitratur noscere ad unguem
 Garrulus, infelix, cæcus, temerarius, amens;
 Usque adeo sibi palpatur, seseque licetur."

See also *pp.* 538, 568, sq.

21.—MELANCHTHON and STADIANUS. (Letter to Calvin, 1543):—
 "Habebam amicum Tubingæ, Franciscum Stadianum, qui dicere solebat;
se utrumque probare, evenire omnia ut divina Providentia decrevit, et tamen
 esse contingentiam, sed se hæc conciliare non posse."

22.—" Multa tegit sacro involucri natura, neque nullis
 Fas est scire quidem mortalibus omnia; multa
 Admirare modo, nec non venerare: neque illa
 Inquires quæ sunt arcanis proxima; namque
 In manibus quæ sunt, hæc nos vix scire putandum.
 Est procul à nobis adeo præsentia veri!"*

(" Full many a secret in her sacred veil
 Hath Nature folded. She vouchsafes to knowledge
 Not every mystery, reserving much
 For human veneration, not research.
 Let us not, therefore, seek what God conceals;
 For even the things which lie within our hands—
 These, knowing, we know not.—So far from us,
 In doubtful dimness, gleams the star of truth!")

23.—JULIUS CÆSAR SCALIGER. (De Subtilitate; Ex. cclxxiv.):—"Sapi-
 entia est vera, nolle nimis sapere." (Ib. Ex. ccvii. sect. 29; and compare
 Ex. ccxlv. sect. 4):—"Humanæ sapientiæ pars est, quædam æquo animo
 nescire velle."† (Ib. Ex. lii.):—"Ubique clamare soleo, nos nihil scire."

* I know not the author of these verses. I find them first quoted by Fer-
 nelius, in his book *De Abditis Rerum Causis*, (L. ii. c. 18.), which appeared
 before the year 1551. They may be his own. They are afterwards given
 by Sennertus, in his *Hypomnemata*, but without an attribution of author-
 ship. By him, indeed, they are undoubtedly taken from Fernelius. Finally,
 they are adduced by the learned Morhof in his *Polyhistor*, who very unlearn-
 edly, however, assigns them to Lucretius. They are not by Palingenius,
 nor Palarinus, nor Hospitalius, all of whose versification they resemble; for
 the last, indeed, they are almost too early.

† I meant (above, p. 37) to quote this passage of Scaliger, but find that
 my recollection confused this and the preceding passage, with, perhaps, the
 similar testimony of Chrysologus, (No. 11.) Chrysologus, indeed, antici-
 pates Scaliger in the most felicitous part of the expression.

24.—JOSEPH JUSTUS SCALIGER. (Poemata; Iambi Guomici. xxi.):

"*Ne curiosus quære causas omnium.*
 Quæcunque libris vis Prophetarum indidit
 Afflata cælo, plena veraci Deo,
 Nec operta sacri supparo silentii
 Irrumpere aude, sed prudenter præteri.
Nescire velle, quæ magister maximus
Ducere non vult, erudita incertitia est." *

25.—GROTIUS. (Poemata: Epigrammata; L. i.):

ERUDITA IGNORANTIA.

"Qui curiosus postulat Totum suæ
 Patere menti, ferre qui non sufficit
 Mediocritatis conscientiam suæ,
 Judex iniquus, æstimator est malus
 Suique naturæque. Nam rerum parens,
 Libanda tantum quæ venit mortalibus,
Nos scire pauca, multa mirari jubet.
 Hic primus error auctor est pejoribus.
 Nam qui fateri nil potest incognitum,
 Falso necesse est placet ignorantiam;
 Umbrasque inanes capet inter nubila,
 Imaginosæ adulter Ixion Deæ.
 Magis quiescet animus, errabit minus,
 Contentus eruditione parabili,
 Nec quæret illam, siqua quærentem fugit.
Nescire quædam, magna pars Sapientiæ est.†

26.—DESCARTES. (Principia; P. i., §§ 36, 41.):—"Neque tamen ullo modo Deus errorum nostrorum author fingi potest, propterea quod nobis intellectum non dedit omniscium. Est enim de ratione intellectus creati, ut sit finitus; ac de ratione intellectus finiti, ut non ad omnia se extendat."
 - - - "Illis vero nos expediemus, si recordemur:—mentem nostram esse finitam; Dei autem potentiam, per quam non tantum omnia quæ sunt aut esse possunt, ab æterno præscivit, sed etiam voluit ac præordinavit, esse infinitam. Ideoque hanc quidem a nobis satis attingi, ut clare ac distincte percipiamus, ipsam in Deo esse; non autem satis comprehendendi, ut videamus quo pacto liberas hominum actiones indeterminatas relinquat. Libertatis autem et indifferentiæ quæ in nobis est, nos ita conscios esse, ut nihil sit, quod evidentius et perfectius comprehendamus. Absurdum enim est, propterea quod non comprehendimus unam rem, quam

* It is manifest that Joseph, in these verses, had in his eye the saying of his father. But I have no doubt, that they were written on occasion of the controversy raised by Gomarus against Arminius.

† In this excellent epigram, Grotius undoubtedly contemplated the corresponding verses of his illustrious friend, the Dictator of the Republic of Letters; but, at the same time, he, an Arminian, certainly had in view the polemic of the Remonstrants and anti-Remonstrants, touching the Divine Decrees. Nor, apparently, was he ignorant of testimonies, Nos. 17, 18.

scimus ex natura sua nobis esse debere incomprehensibilem, de alia dubitare, quam intime comprehendimus, atque apud nosmet ipsos experimur."—On this see also *Spinoza*, (*Princ. Cartes.* ; *Append. P. I.*, c. iii., p. 103, ed. 1.)

27.—PASCAL. (*Pensées* ; *Partie I. Art. vi. sect. 26.*) :—"Si l'homme commençoit par s'étudier lui-même, il verroit combien il est incapable de passer outre. Comment pourroit-il se faire qu'une partle conaût le tout?"* - - - "Qui ne croiroit, à nous voir composer toutes choses d'esprit et de corps, que ce mélange-là nous seroit bien compréhensible? C'est néanmoins la chose que l'on comprend le moins. L'homme est à lui-même le plus prodigieux objet de la nature ; car il ne peut concevoir ce que c'est que corps, et encore moins ce que c'est qu'esprit, et moins qu'aucune chose comment un corps peut être uni avec un esprit. C'est là le comble de ses difficultés, et cependant c'est son propre être : *Modus, quo corporibus adhaeret spiritus, comprehendere ab hominibus non potest ; et hoc tamen homo est.*" †

28.—BOSSUET. (*Traité du libre Arbitre* ; ch. iv.) :—"Quand donc nous nous mettons à raisonner, nous devons d'abord poser comme indubitable, que nous pouvons connoître très-certainement beaucoup de choses, dont toutefois nous n'entendons pas toutes les dépendances, ni toutes les suites. C'est pourquoi la première règle de notre Logique, c'est qu'il ne faut jamais abandonner les vérités un fois connues, quelque difficulté qui survienne, quand on veut les concilier : mais qu'il faut au contraire, pour ainsi parler, tenir toujours fortement comme les deux bouts de la chaîne, quoiqu'on ne voie pas toujours le milieu, par où l'enchaînement se continue."—But see, besides the whole treatise, chapters iii. and iv. throughout.

29.—LOCKE. (*Essay &c.* ; *Introduct.*, § 4.) :—"I suppose it may be of use to prevail with the busy mind of man, to be more cautious in meddling with things exceeding its comprehension ; to stop, when it is at the utmost extent of its tether ; and to sit down in a quiet ignorance of those things, which, upon examination, are found to be beyond the reach of our capacities."—(*Letter to Molyneux*, 1693.) :—"I own freely to you the weakness of my understanding : though it be unquestionable, that there is omnipotence and omniscience in God, our maker, and though I cannot have a clearer perception of any thing, than that I am free ; yet I cannot make freedom in man consistent with omnipotence and omniscience in God, though I am as fully

* This testimony of Pascal corresponds to what Aristotle says :—"There is no proportion of the Infinite to the Finite." (*De Caelo*, L. i. cc. 7, 8.)

† Pascal apparently quotes these words from memory, and, I have no doubt, quotes them from Montaigne, who thus (*L. ii. ch. 12.*) adduces them as from St Augustin : "*Modus, quo corporibus adheret spiritus, omnino mirus est, nec comprehendere ab homine potest ; et hoc ipse homo est.*"—Montaigne's commentator, Pierre Coste, says that these words are from Augustin, *De Spiritu et Anima*. That curious farrago, which is certainly not Augustin's, does not however contain either the sentence or the sentiment ; and Coste himself, who elsewhere gives articulate references to the quotations of his author, here alleges only the treatise in general.

persuaded of both, as of any truths I most firmly assent to. And, therefore, I have long since given off the consideration of that question, resolving all into this short conclusion:—that, if it be possible for God to make a free agent, then man is free; though I see not the way of it."

30.—JACOBI. (Werke II., p. 317, Ueber die Unzertrennlichkeit &c.)—On the inseparability of the notions of Liberty and Foresight from the notion of Reason):—"The union of physical Necessity and moral Freedom in one and the same being, is an absolutely incomprehensible fact, a *miracle* and *mystery* like to the creation. He who comprehends the creation may comprehend this fact; he who comprehends this fact may comprehend the creation and God himself."—The Italics are the author's. But Descartes speaks even more strongly:—"There can be nothing nobler in us than our Free Will; which, in a certain sort, renders us equal to God, and apparently exempts us from his dominion."—Analogous opinions are however expressed by Aristotle and the elder Scaliger; whilst many philosophers and theologians maintain,—it is only through his Free Will that "Man is created in the image of God."

In fact, I have been very chary of adducing those testimonies, which rest the proof of the imbecillity of the human intellect on the impossibility it finds of reconciling divine Prescience and Predestination with the Liberty of man. Of these there need be no end. Cicero, followed by sundry philosophers and even a few divines, to save, as he thought, the Freedom of the human will, ventured to limit the Foreknowledge of God; so that as Augustin well expresses it,—"*dum vult facere liberos, facit sacrilegos.*" Armachanus (Richard Fitz Ralph, Archbishop of Armagh,) a distinguished schoolman of the fourteenth century, specially devoted himself for twenty years to a solution of the problem, but, as he was acute enough to find, in vain. The subtle Cajetan, whom we have already quoted, prudently adjourns the question for the life to come. Our recent writers upon metaphysical questions, frequently do not even apprehend the difficulty; and not a few confound the Liberty of Spontaneity (to *Do* as we Will)—a liberty which no fatalist ever disallowed, with the Liberty from Necessity (to *Will* as we Will)—the liberty which is alone in question.

II.—*Testimonies to the more special fact, that all our Knowledge, whether of Mind or of Matter, is only phænomenal.*

Our whole knowledge of mind and of matter is relative,—conditioned,—relatively conditioned. Of things absolutely or in themselves, be they external, be they internal, we know nothing,

or know them only as ineognisable; and become aware of their incomprehensible existence, only as this is indirectly and accidentally revealed to us, through certain qualities related to our faculties of knowledge, and which qualities, again, we cannot think as unconditioned, irrelative, existent in and of themselves. All that we know is therefore phænomenal,—phænomenal of the unknown.* The philosopher speculating the worlds of matter and of mind, is thus, in a certain sort, only an ignorant admirer. In his contemplation of the universe, the philosopher, indeed, resembles Æneas contemplating the adumbrations on his shield; as it may equally be said of the sage and of the hero,—

“*Miratur; Rerumque ignarus, Imagine gaudet.*”

Nor is this denied; for it has been commonly confessed, that, as substances, we know not what is Matter and are ignorant of what is Mind. With the exception, in fact, of a few late Absolutist theorists in Germany, this is, perhaps, the truth of all others most harmoniously re-echoed by every philosopher of every school; and, as has so frequently been done, to attribute any merit, or any singularity to its recognition by any individual thinker, more especially in modern times, betrays only the ignorance of the encomiasts.

1.—PROTAGORAS, (as reported by Plato, Aristotle, Sextus Empiricus, Lærtius, &c.):—“Man is [for himself] the measure of all things.” (See Bacon, No. 14.)

2.—ARISTOTLE. (*Metaphysica*; L. vii., c. 10.):—“Matter is incognisable absolutely or in itself.”—(*De Anima*, L. iii., c. 5.):—“The intellect knows itself, only in knowing its objects.”—The same doctrine is maintained at length in the *Metaphysics*, b. xii., cc. 7 and 9, and elsewhere.

3.—ST AUGUSTIN. (*De Trinitate*; L. ix., cc. 1, 2.):—The result is—“Ab utroque notitia paritur; a cognoscente et cognito.”—(Ib. L. x., cc. 3–12.):—Here he shows that we know Mind only from the phænomena of which we are conscious; and that all the theories, in regard to the substance of what

* *Hypostasis* in Greek, (of *οὐσία* I do not now speak, nor of hypostasis in its ecclesiastical signification,) and the corresponding term in Latin, *Substantia*, (per se *subsistens*, or *substantia*, i. e. *accidentibus*, whichever it may mean,) expresses a relation—a relation to its phænomena. A basis for phænomena, is, in fact, only *supposed*, by a necessity of our thought; even as a relative it is *not positively known*. On this real and verbal relativity, see St Augustin, (*De Trinitate*, L. vii., cc. 4, 5, 6.)—Of the ambiguous term *Subject* (*ὑποκείμενον*) I have avoided speaking.

thinks, are groundless conjectures.—(Confessionum, L. xii. c. 5.) :—Of our attempts to cognise the basis of material qualities he says ; “ Dum sibi hæc dicit humana cogitatio, conetur eam, vel nosse ignorando, vel ignorare noscendo.”

4.—BOETHIUS. (De Consolatione Philosophiæ ; L. v., pr. 4.) :—“ Omne quod cognoscitur, non secundum sui vim, sed secundum cognoscentium potius comprehenditur facultatem.”—(Pr. 6.) :—“ Omne quod scitur, non ex sua, sed ex comprehendentium, natura cognoscitur.”

5.—AVERROES. (In Aristotelem De Anima ; L. iii. Text. 8) :—“ Intellectus intelligit seipsum modo accidentali.”

6.—ALBERTUS MAGNUS. (Contra Averroem de Unitate Intellectus ; c. 7) :—“ Intellectus non intelligit seipsum, nisi per accidens fiat intelligibile ; ut materia cognoscitur per aliquid, cujus ipsa est fundamentum. Et si aliqui dicant intellectum intelligi per hoc, quia per essentiam est præsens sibi ipsi, hoc tamen secundum philosophiam non potest dici.” (See also *Aquinas* (Summa Theologiæ, P. i. Qu. 89, Art. 2 ; De Veritate, Qu. 10, Art. 8) and *Ferrariensis* (Contra Gentes, L. iii. c. 46.)

7.—GERSON. (De Concordia Metaphysicæ) :—“ Eus quodlibet diei potest habere duplex Esse ; sumendo Esse valde transcendentaliter. Uno modo, sumitur Ens, pro natura rei in seipsa ; alio modo, prout habet Esse objectale seu repræsentativum, in ordine ad intellectum creatum vel increatum.—Hæc autem distinctio non conficta est vel nova ; sed a doctoribus, tam metaphysicis quam logicis subtilibus, introducta. Eus consideratum seu relictum prout quid absolutum, seu res quædam in seipsa, plurimum differt ab Esse, quod habet objectaliter apud intellectum. - - - - - Ens reale non potest constituere scientiam aliquam, si non consideretur in suo Esse objectali, relato ad ipsum Ens reale, sicut ad primarium et principale objectum.”

8.—LEO HEBREUS. (De Amore ; Dial. i.) :—“ Cognita res à cognoscente, pro virtus ipsius cognoscentis, hand pro rei cognitæ dignitate recipi solet.”

9.—MELANCHTHON. (Erotemata Dialecticæ ; L. i. Pr. Substantia) :—“ Mens humana, per accidentia, agnoscit substantiam. Non enim cernimus oculis substantias, tectas accidentibus, sed mente eas agnoscimus. Cum videmus aquam manere eandem, sive sit frigida, sive sit calida, ratiocinamur :—aliud quiddam esse formas illas discedentes, et aliud quod eas sustinet.”

10.—JULIUS CÆSAR SCALIGER. (De Subtilitate ; Ex. cccvii. § 12) :—“ Nego tibi ullam esse formam nobis notam plene, et plane : nostramque scientiam esse umbram in sole [contendo]. Formarum enim cognitio est rudis, confusa, nec nisi per *πρωτάσεις*. Neque verum est,—formæ substantialis speciem recipi in intellectum. Non enim in sensu unquam fuit.”—(Ib. Ex. cccvii. § 21.) :—“ Substantias non sua specie cognosci a nobis, sed per earum acci-

dentia. Quis enim me doceat, quid sit substantia, nisi illis miseris verbis,—*res subsistens*? - - - - Quid ipsa illa substantia sit, plane ignoras; sed, sicut Vulpes elusa a Ciconia, lambimus vitreum vas, pultem haud attingimus."

11.—FRANCIS PICCOLOMINI. (De Mente Humana; L. i. c. 8.):—"Mens intelligit se, non per se primo, sed cum cætera intellexerit; ut dicitur in L. iii. de Anima, t. 8, et in L. xii. Metaphysicæ, t. 38."

12.—GIORDANO BRUNO. (De Imaginum, Signorum et Idearum Compositione; Dedicatio.):—"Quemadmodum, non nosmetipsos in profundo et individuo quodam consistentes, sed nostri quædam externa de superficie (colorem, scilicet, atque figuram,) accidentia, ut oculi ipsius similitudinem in speculo, videre possumus: ita etiam, *neque intellectus noster se ipsum in se ipso, et res ipsas omnes in seipsis*, sed in exteriori quadam specie, simulacro, imagine, figura, signo. Hoc quod ab Aristotele relatum, ab antiquis prius fuit expressum; at a neotericorum paucis capitur. Intelligere nostrum, (id est, operationes nostri intellectus,) aut est phantasia, aut non sine phantasia. Rursum. Non intelligimus, nisi phantasmata speculamur. Hoc est, quod non in simplicitate quadam, statu et unitate, sed in compositione, collatione, terminorum pluralitate, mediante discursu atque reflexione, comprehendimus."*

13.—CAMPANELLA. (Metaphysica; L. i. c. 1. dub. 3, p. 12.):—"Ergo, non videntur res prout sunt, neque videntur extare nisi respectus."

14.—BACON. (Instauratio Magna; Distr. Op.):—"Informatio sensus semper est ex analogia hominis, non ex analogia universi; atque magno prorsus errore asseritur, sensum esse mensuram rerum." (See Protagoras, n. 1.)

15.—SPINOZA. (Ethica; Pars. II. Prop. xix.):—"Mens humana ipsam humanum corpus non cognoscit, nec ipsum existere scit, nisi per ideas affectionum quibus corpus afficitur."—(Prop. xxiii.)—"Mens se ipsam non cognoscit, nisi quatenus corporis affectionum ideas percipit." Et alibi.—(See Bruno, n. 12.)

16.—SIR ISAAC NEWTON. (Principia, Schol. Ult.):—"Quid sit rei alienius substantia, minime cognoscimus. Videmus tantum corporum figuras et colores, audimus tantum sonos, tangimus tantum superficies externas, olfacimus odores solos, et gustamus saporis: intimas substantias nullo sensu, nulla actione reflexa, cognoscimus."

17.—KANT. (Critik der reinen Vernunft; Vorr.):—"In perception every

* Had Bruno adhered to this doctrine, he would have missed martyrdom as an atheist; but figuring to posterity, neither as a great fool (if we believe Adelung), nor as a great philosopher (if we believe Schelling). Compare the parallel testimony of Spinoza (15), a fellow Pantheist, but on different grounds.

thing is known in conformity to the constitution of our faculty." And a hundred testimonies to the same truth might be adduced from the philosopher of Koenigsberg, of whose doctrine it is, in fact, the foundation.

III. *The recognition of Occult Causes.*

This is the admission, that there are phænomena which, though unable to refer to any known cause or class, it would imply an irrational ignorance to deny. This general proposition no one, I presume, will be found to gainsay; for, in fact, the causes of all phænomena are, at last, occult; and thus, at last we must, perforce, confess the venerable abyss of ignorance. There has, however, obtained a not unnatural presumption against occult causes; and this presumption, though often salutary, has sometimes operated most disadvantageously to science, from a blind and indiscriminate application; and in two ways.—In the *first* place, it has induced men lightly to admit asserted phænomena, false in themselves, if only confidently assigned to otherwise acknowledged causes.—In the *second* place, it has induced them obstinately to disbelieve phænomena, in themselves certain and even manifest, if these could not at once be referred to already recognised causes, and did not easily fall in with the systems prevalent at the time.—An example of the *former*, is seen in the facile credence popularly accorded, in this country, to the asserted facts of Craniology; though even the fact of that hypothesis, first and fundamental,—the fact, most probable in itself, and which can most easily be proved or disproved by the widest and most accurate induction, is diametrically opposite to the truth of nature; I mean the asserted correspondence between the development and hypothetical function of the cerebellum, as manifested in all animals, under the various differences of age, sex, season, integrity and mutilation. This, (among other of the pertinaciously asserted facts,) I *know*, by a tenfold superfluous evidence, to be even ludicrously false.—An example of the *latter*, is seen in the difficult credence accorded in this country to the phænomena of Animal Magnetism; phænomena in themselves the most unambiguous, which, for nearly half a century, have been recognized generally and by the highest scientific authorities in Germany; while, for nearly a quarter of a century, they have been verified and formally confirmed by the Academy of Medicine in France.*—In either case, criticism was required, and criticism was wanting.

* [(1853.) In the "Journal of Medical Science," conducted, in chief, by

So true is the saying of Cullen :—" There are more false facts current in the world than false theories." So true is the saying of Hamlet :—" There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy." But averse from experiment, and gregariously credulous,—" *L'homme est de glace aux vérités, il est de feu pour les mensonges.*"

The following are a very few specimens of the highest philosophical opinion upon this point :—

1.—ALEXANDER OF APHRODISIAS. (*Problemata*) :—" There are many things in nature of which no reason can be assigned, wholly surpassing, as they do, the measure of human intellect, and known only to God, who is the parent of all things."

2.—JULIUS CÆSAR SCALIGER.* In his commentary on Theophrastus " Touching the Causes of Plants," he repeatedly asserts, as the Aristotelic doctrine, the admission of Occult Causes. Thus, (L. ii. c. 5) :—" *Hoc dixit (Theophrastus), nequis ab eo nunc exigit occultas illarum, quas subicit, causas. Quasi dicat,—Sapienti multa licet ignorare.*" In like manner, (L. iv. c. 13.) :—" *Hanc quoque locum simul cum aliis adducere potes adversus eos qui negant Peripateticis ab occulta proprietate quicquam fieri. Apud hunc philosophum sæpe monimus inveniri. Est autem asyllum humanæ Imbecillitatis, ac simile perfugium illi Periclis,—εἰς τὰ δειρρά.*" This we may translate,—" Secret service money."—The same he had also previously

four Professors of the Medical Faculty of the University of Edinburgh (July 1852, p. 56), there is an attack on me, in reference to this subject, for being, unfortunately, not quite so ignorant as the writer is or affects to be; but which there becomes relatively praiseworthy, inasmuch as in the whole article it stands alone, in not founding on a mis-statement—on a simple reversal of the fact. Harmless to me, it, however, deals an awkward or malicious slap to the most distinguished of the four Conductors, to say nothing of any other Professor of the Medical Faculty of the University. But will this consistent and conscientious Journal venture to deny the truth of *Dr Esdaile's* three hundred operations, on three hundred patients, rendered anæsthetic through means of Animal Magnetism,—operations performed in the Magnetic Hospital of the East India Company, and a report of which was solicited from that gentleman himself, on his return from Calcutta, by its own Conductors ?]

* I have quoted the elder Scaliger, under all the three heads of this article, for a truth in his language is always acutely and strikingly enounced. The writings of no philosopher, indeed, since those of Aristotle, are better worthy of intelligent study; and few services to philosophy would be greater than a systematic collection and selection of the enduring and general views of this illustrious thinker. For, to apply to him his own expressions, these "*zopyra*," these "*semina eternitatis*," lie smothered and unfruitful in a mass of matters of merely personal and transitory interest. I had hoped to have attempted this in the appendix to a work "*De vita, genere et genio Scaligerorum*;" but this I hope no longer.

declared in his book *De Subtilitate* ; where, for example, (Ex. cexviii, § 8), he says :—" Ad manifestas omnia deducere qualitates summa impudentia est ;" for there are many of these, " quæ omnino latent animos temperatos, illudunt curiosis ;" and he derides those, " qui irrident salutare asyllum illud, Occultæ Proprietatis."

3.—ALSTEDIUS. (*PHYSICA* ; 1630,) Pars. I. c. xlii., reg. 4.) :—" Quod Augustinus ait, ' Multa cognoscendo ignorari, et ignorando, cognosci,' hic imprimis habet locum, ubi agitur de Occultis Qualitatibus, quarum investigatio dicitur Magia Naturalis, id est, præstantissima naturæ indagatio in qua verbum modestiæ, Nescio, subinde usurpandum est. Verbum modestiæ dico, non autem stultitiæ."

4.—VOLTAIRE. (*Dictionnaire Philosophique* ; voce *Occultes*.) :—" Qualités Occultes.—On s'est moqué fort longtemps des qualités occultes ; on doit se moquer de ceux qui n'y croient pas. Répétons cent fois, que tout principe, tout premier ressort de quelque œuvre que ce puisse être du grand Demi-ourgos, est occulte et caché pour jamais aux mortels." And so forth.—(*Physique Particulière*, ch. xxxlii.) :—" Il y a donc certainement des lois éternelles, inconnues, suivant lesquelles tout s'opère, sans qu'on puisse les expliquer par la matière et par le mouvement. - - - Il y a dans toutes les Académies une chaire vacante pour les vérités inconnues, comme Athènes avait un autel pour les dieux ignorés." *

* Besides the few testimonies adduced, I would refer, in general, for some excellent observations on the point, to Fernellius "*De Abditis Rerum Causis*," and to the "*Hypomnemata*" of Sennertus.

APPENDIX II. LOGICAL.

(A.) OF SYLLOGISM, ITS KINDS, CANONS, NOTATIONS, &c.

TOUCHING the principle of an explicitly *Quantified Predicate*, I had by 1833 become convinced of the necessity to extend and correct the logical doctrine upon this point. In the article on Logic, reprinted above, and first published in April 1833, the theory of Induction there maintained proceeds on a thorough-going quantification of the predicate, in affirmative propositions. (P. 163, sq.)

Before 1840, I had, however, become convinced, that it was necessary to extend the principle equally to negatives; for I find by academical documents, that in that year, at latest, I had publicly taught the unexclusive doctrine.

The following is an extract from the "Prospectus of Essay towards a New Analytic of Logical Forms," appended to the edition of Reid's Works, published by me in 1846:—

"In the *first* place, in the Essay there will be shown, that the Syllogism proceeds, not as has hitherto, virtually at least, been taught, in one, but in the *two* correlative and counter *wholes*, (Metaphysical) of *Comprehension*, and (Logical) of *Extension*;—the major premise in the one whole, being the minor premise in the other, &c.—Thus is relieved, a radical defect and vital inconsistency in the present logical system.

In the *second* place, the self-evident truth,—That we can only rationally deal with what we already understand, determines the simple logical postulate,—*To state explicitly what is thought implicitly*. From the consistent application of this postulate, on which Logic ever insists, but which Logicians have never fairly obeyed, it follows:—that, logically, we ought to take into account the *quantity*, always understood in thought, but usually, and for manifest reasons, elided in its expression, not only of the *subject*, but also of the *predicate*, of a judgment. This being done, and the necessity of doing it, will be proved against Aristotle and his repeaters, we obtain, *inter alia*, the ensuing results:—

1°. That the *preindesignate terms* of a proposition, whether subject or predicate, are never, on that account, thought as *indefinite* (or indeterminate) in quantity. The only indefinite, is *particular*, as opposed to *definite*, quantity; and this last, as it is either of an extensive *maximum* undivided, or of an extensive *minimum* indivisible, constitutes quantity *universal* (general,) and quantity *singular* (individual.) In fact, *definite* and *indefinite* are the only

quantities of which we ought to hear in Logic; for it is only as indefinite that particular, it is only as definite that individual and general, quantities have any (and the same) logical avail.

2°, The revocation of the *two terms of a Proposition* to their *true relation*; a proposition being always an *equation* of its subject and its predicate.

3°, The consequent reduction of the *Conversion of Propositions* from three species to *one*—that of Simple Conversion.

4°, The reduction of all the *General Laws of Categorical Syllogisms* to a *Single Canon*.

5°, The evolution from that *one canon* of all the *Species and varieties of Syllogisms*.

6°, The *abrogation* of all the *Special Laws of Syllogism*.

7°, A demonstration of the *exclusive possibility of Three syllogistic Figures*; and (on new grounds) the scientific and final *abolition of the Fourth*.

8°, A manifestation that *Figure* is an *unessential variation* in syllogistic form; and the consequent *absurdity of Reducing* the syllogisms of the other figures to the first.

9°, An enunciation of *one Organic Principle* for each *Figure*.

10°, A determination of the true *number* of the legitimate *Moods*; with

11°, Their *omplification* in number (*thirty-six*);

12°, Their numerical *equality* under all the figures; and,

13°, Their *relative equivalence*, or virtual identity, throughout every schematic difference.

14°, That, in the *second* and *third* figures, the extremes, holding both the same relation to the middle term, *there is not*, as in the first, *an opposition and subordination between a term major and a term minor, mutually containing and contained, in the counter wholes of Extension and Comprehension*.

15°, Consequently, in the *second* and *third* figures, there is *no determinate major and minor premise*, and there are *two indifferent conclusions*; whereas, in the *first* the *premises* are *determinate*, and there is a *single proximate conclusion*.

16°, That the *third*, as the figure in which *Comprehension* is predominant, is more appropriate to *Induction*.

17°, That the *second*, as the figure in which *Extension* is predominant, is more appropriate to *Deduction*.

18°, That the *first*, as the figure in which *Comprehension* and *Extension* are in equilibrium, is common to *Induction* and *Deduction*, indifferently."

What follows was subjoined, as a note, to the "Essay on the New Analytic of Logical Forms," by Mr Thomas Spencer Baynes, which obtained the prize proposed in 1846, but was not published until 1850. The foot-notes are now added.

"The ensuing note contains a summary of my more matured doctrine of the Syllogism, in so far as it is relative to the preceding Essay.

All *mediate* inference is one—that incorrectly called *Categorical*; for the

Conjunctive and *Disjunctive* forms of *Hypothetical* reasoning are reducible to immediate inferences.

Mentally one, the Categorical Syllogism, according to its order of enunciation, is either *Analytic* (A) or *Synthetic* (B).—*Analytic*, if (what is inappropriately styled) the conclusion be expressed first, and (what are inappropriately styled) the premises be then stated as its reasons. (These might be called the Preassertion and the Proofs, or Probandum and Probationes; Proof or Probation would apply to the whole process, whether analytic or synthetic.)—*Synthetic*, if the premises precede, and, as it were, effectuate the conclusion.*—These general forms of the syllogism can with ease be distinguished by a competent notation; and every special variety in the one has its corresponding variety in the other.

Though the following division applies equally to the Analytic and to the Synthetic syllogism, yet taking it under the *latter* form (B), (which, though perhaps less natural,† has been alone cultivated by logicians, and to which,

* [This, in the *first* place, relieves the syllogism of *two one-sided views*. The Aristotelic syllogism is exclusively synthetic; the Epicurean (or Neoclesian) syllogism was—for it has been long forgotten—exclusively analytic; whilst the Hindoo syllogism is merely a clumsy agglutination of these counter forms, being nothing but an operose repetition of the same reasoning, enounced, 1°, analytically, 2°, synthetically. I say clumsy, for the example interpolated is an extralogical superfluity, and may be thrown out of account. In thought, the syllogism is organically one; and it is only stated in an analytic or synthetic form, from the necessity of adopting the one order or the other, in accommodation to the vehicle of its expression—Language. For the conditions of language require, that a reasoning be distinguished into parts, and these detailed before and after other. The analytic and synthetic orders of enunciation are, thus, only accidents of the syllogistic process. This is, indeed, shewn in practice; for our best reasonings proceed indifferently in either order.

In the *second* place, this central view vindicates the Syllogism from the *objection of Petitio Principii*, which professing logically to annul logic, or at least to reduce it to an idle tautology, defines syllogistic—the art of avowing in the conclusion what has been already confessed in the premises. This objection (which has at least an antiquity of three centuries and a half) is only applicable to the synthetic or Aristotelic order of enunciation, which the objectors, indeed, contemplate as alone possible. It does not hold against the analytic syllogism; it does not hold against the syllogism considered aloof from the accident of its expression; and being proved irrelevant to these, it is easily shewn in reference to the synthetic syllogism itself, that it applies only to an accident of its external form.]

† [I say less natural. For if it be asked—“*Is C in A?*” surely it is more natural to reply,—*Yes, (or C is in A), for C is in B and B in A, (or, for B is in A and C in B);* than to reply,—*B is in A, and C in B. (or C is in B and B in A), therefore, C is in A.*

In point of fact, the analytic syllogism is not only the more natural, it is even *presupposed* by the synthetic. To express in words, we must first analyse in thought the organic whole—the mental simultaneity of a simple

therefore, exclusively all logical nomenclature is relative,)—the syllogism is again divided into the *Unfigured* (a) and the *Figured* (b).

The Unfigured Syllogism (a) is that in which the terms compared do not stand to each other in the reciprocal relation of subject and predicate, being in the same proposition, either both subjects or (possibly) both predicates.* Here the dependency of Breadth and Depth, (Extension and Intension, Extension and Comprehension &c.) does not subsist, and the order, accordingly, of the premises is wholly arbitrary. This form has been overlooked by the logicians, though equally worthy of development as any other; in fact, it affords a key to the whole mystery of Syllogism. And what is curious, the Canon by which this syllogism is regulated, (what may be called that of logical Analogy or Proportion,) has, for above five centuries, been commonly stated as the one principle of reasoning, whilst the form of

reasoning; and then, we may reverse in thought the process, by a synthetic return. Further, we may now enounce the reasoning in either order; but, certainly, to express it in the essential, primary, or analytic order, is not only more natural, but more direct and simple, than to express it in the accidental, secondary, or synthetic. This also avoids the objection of *Petio Principii*, at least as it has been stated by modern logicians; for the objection as taken by the ancient sceptics applies to either form.

* [Subjects, as :

All C and some B are (some) convertible ;

All B and all A are (some) convertible ;

∴ All C and some A are (some) convertible.

Predicates, as :

(Some) convertibles are all C and some B ;

(Some) convertibles are all B and all A ;

∴ (Some) convertibles are all C and some A.

I need hardly repeat, that the Premises or Proofs may be reversed in order of enunciation, this order being indifferent; and that for *convertible* may be used *identical*, *same*, *equal*, &c., or any term expressing an equation.

Dr Reid in his Account of Aristotle's Logic (Works, p. 702) says :—“ This simple reasoning, *A is equal to B, and B to C, therefore A is equal to C*, cannot be brought into any syllogism in figure and mode.” To this I appended the following Note :—“ Not as it stands; for, as expressed, this reasoning is elliptical. Explicitly stated, it is as follows :—

What are equal to the same, are equal to each other ;

A and C are equal to the same (B) ;

Therefore, A and C are equal to each other.”

I would now explicate this as a mere *Unfigured* syllogism, thus :—

A and B are equal ;

B and C are equal ;

Therefore A and C are equal.

Or in an *analytic* form :—

A and C are equal ; for

A and B are equal ; and

B and C are equal.]

reasoning itself, to which it properly applies, has never been generalized. This Canon, which has been often erroneously, and never adequately enounced, in rules four, three, two, or one, is as follows:—*In as far as two notions, (notions proper or individuals,) either both agree, or one agreeing, the other does not, with a common third notion; in so far, these notions do or do not agree with each other.* (This Canon thus excludes:—1°, an undistributed middle term, as then no common notion; 2°, two negative premises, as then no agreement of either of the other notions therewith.)—The propositions of this syllogism in no-figure are marked in the scheme of pure logical notation by horizontal lines of uniform breadth.

In the Figured Syllogism (b), the terms compared are severally subject and predicate, consequently, in reference to each other, containing and contained in the counter wholes of Intension and Extension. Its Canon is:—*What worse relation of subject and predicate subsists between either of two terms and a common third term, with which one, at least, is possibly related; that relation subsists between the two terms themselves.*—In the scheme of pure logical notation a horizontal tapering line marks this relation; the subject standing at the broad, the predicate at the pointed end.

There are *three*, and only three, Figures—the same as those of Aristotle; and in each of these we may distinguish the orders of Breadth and of Depth.

The *First Figure* emerges, when the middle term is subject of the one extreme and predicate of the other; that is, when we pass from the one extreme to the other, through the middle, in the order whether of Extension or of Intension. In the notation of this Figure, we may of course arbitrarily make either of these orders to proceed from left to right, or from right to left; that is, two arrangements are competent.—There is here, determinately, one direct and one indirect conclusion.

The *Second Figure* arises, when the middle term is the predicate of both extremes; the order of Breadth proceeding from middle to extremes, the order of Depth from extremes to middle.

The *Third Figure* is determined, when the middle term is the subject of both extremes; the order of Extension proceeding from extremes to middle, the order of Intension from middle to extremes.

In the Second and Third Figures there is thus only one arrangement possible in logical notation. And as Extension and Intension are here in equilibrium, there is no definite major and minor premise, and consequently no indirect, but two indifferent conclusions. This is best marked by two crossing lines under the premises, each marking the extreme standing to the other as subject or as predicate.

Of course each Figure has its own Canon, but these it is not here requisite to state.* The First Figure, besides its more general canon, has also two

* [The several Canons for the several Figures may however now be given. They are: for the

First Figure.—"What worse relation of determining, (predicate,) and of determined, (subject,) is held by either of two notions to a third, with which one at least is positively related;—that relation do they immediately (directly) hold to each other, and indirectly (mediately,) its converse."

more special,—one for Syllogisms in the order of Extension, and one for Syllogisms in the order of Intension. And what is remarkable, Aristotle's *Dictum de Omni*, &c., (in the Prior Analytics,) gives that for Extension, whilst his rule—*Prædicatum prædicati*, &c. (in the Categories), affords that for Intension, although this last order of Syllogism was not developed by him or the logicians;—both, however, are inadequately stated.

In regard to the notation of *Quality* and *Quantity*, and in the syllogisms both Unfigured and Figured.—Negation is marked by a perpendicular line, which may be applied to the copula, to the term, or to the quantification.—As to Quantity (for there are subordinate distinctions), it is sufficient here to state, that there is denoted by the sign [, or ,] (for the quantity of one term ought to face the other), *some*;—by the sign [:], *all*;—by the sign [.], *a half*;—by the sign [! or :], *more than a half*. The last two are only of use to mark the *ultra-total* distribution of the middle term of a syllogism, between both the premises, as affording a certain inference, valid, but of little utility. This I once thought had been first generalized by me, but I have since found it fully stated and fairly appreciated by Lambert,* to say nothing of Frommichen.

Above (p. 76 [of Mr Baynes's Essay]) is a detail of my pure logical notation, as applicable to the *thirty-six moods* of the first figure. The order there is not, however, that which I have adopted. The following is my final arrangement, and within brackets is its correspondence with the numbers of that given above:—The moods are either A) *Balanced*, or B) *Unbalanced*. In the former class both *terms* and *propositions* are balanced, and it contains two moods—i; ii, [=i; ii.] In the latter class there are two subdivisions. For either, a) the *terms* are unbalanced,—iii, iv, [=xi, xii]; or, b) both the *terms* and *propositions* are unbalanced,—v, vi; vii, viii; ix, x; xi, xii, [=vii, viii; iii, iv; v, vi; ix, x.] The following equation applies to my table of moods given in Mr Thomson's *Laws of Thought*:—i; ii; xi, xii; vii, viii; iii, iv; v, vi; ix, x.—The present arrangement is also more minutely determined by another principle, but this it is not here requisite to state.

If we apply the thirty-six moods to any *matter* however abstract, say letters, there will emerge *forty-two* syllogisms; for the formal identity of the balanced moods will then be distinguished by a material difference. On the contrary, if we regard the mere *formal* equivalence of the moods, these will be reduced to *twenty-one* reasonings,—*seven affirmative*, and *fourteen negative*. Of the balanced moods, i and ii are converted each into itself; of the unbalanced, every odd, and the even number immediately following, are

Second Figure.—"What worse relation of determined, (subject,) is held by either of two notions to a third, with which one at least is positively related;—that relation do they hold indifferently to each other."

Third Figure.—"What worse relation of determining, (predicate,) is held by either of two notions to a third, with which one at least is positively related;—that relation do they hold indifferently to each other."

* [On the use which has been made in this country of the logical speculations of Lambert and Ploucquet, it would be out of place here to say anything. But see Appendix II. (B.)]

convertible; and in negatives, the first and second moods (a, b) of the corresponding syzygy or jugation, is reduced from or to the second and first moods (b, a) of its reciprocal.

There are no exceptions. The Canon is thoroughgoing. Only it must be observed: 1°, that the doctrine is wrong which teaches, that a universal negation is not a *worse* relation than a particular; 2°, that the connection of a negative with an affirmative mood, is regulated exclusively by the identity in *quantity* of their *Syzygy* (Jugation, Conjugation,) or Antecedent. The Greeks, in looking to the conjugation of the premises alone, are more accurate than the Latins, who regard all the three propositions of a syllogism in the determination of a mood.

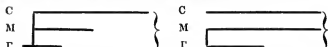
It is not to be forgotten, that as the correlation of the logical terms ought to be known only from the expression, (ex facie propositionis aut syllogismi,) for all other knowledge of the reciprocal dependence of notions is contingent, material, and extralogical; and as the employment of letters, following upon each other in alphabetical order, may naturally suggest a corresponding subordination in the concepts which they denote: I have adopted the signs C and Γ , which are each the third letter in its respective alphabet, for the extremes; and the sign M, for the middle term of the syllogism. The scheme is thus emancipated from all external associations, and otherwise left free in application. I also transpose the former symbols in the interconvertible moods; so that whereas in the one stand C M Γ , in the other stand Γ M C."*

* [The following Table is, in part, an epitome of the preceding Note:—

Inference (Subject and Predicate quantified.)	Immediate; of which some kinds are	Recognised, as Propositional. (Various.)		
		Not recognised, as Syllogistic.	Disjunctive. Conjunctive.	Hypo- thetical.
	Mediate; Syllogism Proper, (Categorical.)	A) Analytic.	a) Unfigured.	All with same Moods.
		B) Synthetic.	b) Figured, (Intensive or Extensive) in	F. I. F. II. F. III.

The notation previously spoken of, represents every various syllogism in all the accidents of its external form. But as the number of Moods in Syllogisms Analytic and Synthetic, Intensive

and Extensive, Unfigured and Figured, (and of this in all the figures,) are the *same*; and as a reasoning, essentially identical, may be carried through the *same numerical mood*, in every genus and species of syllogism:—it seems, as we should wish it, that there must be possible also, a notation precisely manifesting the *modal* process, in all its essential *differences*, but, at the same time, in its internal *identity*, abstract from every accidental variety of external form. The anticipation and wish are realised; and realised with the utmost clearness and simplicity, in a notation which fulfils, and *alone* fulfils these conditions. This notation I have long employed: and the two following are specimens. Herein, four common lines are all the requisites: three (horizontal) to denote the *terms*; one (two?—perpendicular) or the want of it, at the commencement of comparison, to express the *quality* of affirmation or of negation; whilst *quantity* is marked by the relative length of a terminal line within, and its indefinite excur-rence before, the limit of comparison. This notation can represent equally *total* and *ultra-total* distribution, in simple syllogism and in sorites; it shews, at a glance, the *competence* or *incompetence* of any conclusion; and every one can easily evolve it.

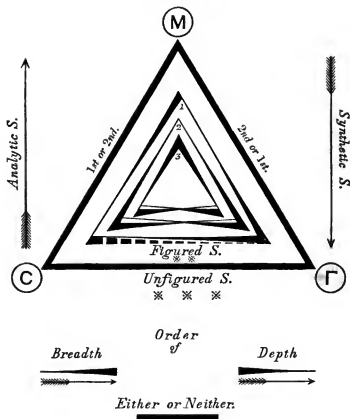


Of these: the former, with its converse, includes, *Darii*, *Dabitis*, *Datisi*, *Disamis*, *Dimaris*, &c.; whilst the latter, with its converse, includes *Celarent*, *Cesare*, *Celanes*, *Camestres*, *Cameles*, &c. But of these, those which are represented by the same diagram are, though in different figures, formally, the same mood. For in this scheme, *each* of the thirty-six *moods* has its *peculiar* diagram; whereas, in all the other geometrical schemes, hitherto proposed, (whether by lines, angles, triangles, squares, parallelograms, or circles,) the same (complex) diagram is necessarily employed, to represent an indefinite plurality of moods. These schemes thus tend, rather to complicate, than to explicate,—rather to darken, than to clear up.—The principle of this notation may be realised in various forms.

(1853.) The following Diagram affords a condensed view of my other scheme of Syllogistic Notation, fragments of which, in detail,

will be found in Mr Thomson's "Outline of the Laws of Thought," and in Mr Baynes's "Essay on the New Analytic of Logical Forms." The paragraphs appended will supply the necessary explanations.

SYLLOGISM.



1.) A Proposition (*διάστημα*, intervallum, *πρότασις*, literally pro-tensio, the stretching out of a line from point to point,) is a mutual relation of two terms (*ἔξω*) or extremes (*ἄκρα*). This is therefore well represented,—the two Terms, by two letters, and their Relation, by a line extended between them.

2.) A Syllogism is a complexus of Three Terms in Three Propositions.—It is therefore adequately typified by a Triangle,—by a Figure of three lines or sides.

3.) As upwards and downwards is a procedure arbitrary in the diagram, the diagram indicates that we can, indifferently, either proceed from the Premises (rationes), to the Conclusion (rationatum), or from the Conclusion to the Premises; the process being only in different points of view, either Synthetic or Analytic. (An exclusive and one-sided view, be it remembered, has given an inadequate name to what are called Premises and Conclusion.)

4.) Rationally and historically, there is no ground for constituting that Premise into Major which is enounced *first*, or that Premise into Minor which is enounced *last*. (See after, p. 697, &c.) The moods of what is called the Fourth Figure and the Indirect moods of the First Figure are thus identified.—In the diagram accordingly, it is shewn, that as right or left in the order of position is only accidental, so is first or last in the order of expression.

5.) The diagram truly represents, by its various concentric triangles, the Unfigured Syllogism, as *involving* the Figured, and of the latter, the First Figure as involving the two others. (In fact, the whole differences of Figure and Figures are accidental; Moods alone are essential, and in any Figure and in none, these are always the same and the same in number.)

6.) Depth and Breadth, Subject and Predicate, are denoted by the thick and thin ends of the same propositional line.

7.) Depth and Breadth are quantities always co-existent, always correlative, each being always in the inverse ratio of the other.—This is well shown in the connection and contrast of a line gradually diminishing or increasing in thickness from end to end.

8.) But though always co-existent, and consequently, always, to some amount, potentially inferring each other, still we cannot, without the intervention of an actual inference, at once jump from the one quantity to the other,—change, per saltum, Predicate into Subject and Subject into Predicate. We must proceed gradatim. We cannot arbitrarily commute the quantities, in passing from

the Quæsitum to the Premises, or in our transition from the Premises to the Conclusion. When this is apparently done (as in the Indirect moods of the First Figure and in all the moods of the Fourth,) the procedure is not only unnatural, but virtually complex and mediate; *the mediacy being concealed by the concealment of the mental inference which really precedes.*—Indicated by the line and broken line for the First Figure.

9.) In Syllogism, Figure and the varieties of Figure are determined by the counter relations of Subject and Predicate subsisting between the syllogistic terms,—between the Middle and Extremes.—All adequately represented.

10.) Figure and the differences of Figures all depending upon the difference of the mutual contrast of Subject and Predicate between the syllogistic terms; consequently, if this relation be abolished,—if these terms be made all Subjects (or it may be all Predicates), the distinction of Figure will be abolished also. (We do not abolish, be it noted, the Syllogism, but we recall it to one simple form.)—And this is represented in the diagram. For as the opposition of Subject and Predicate, of Depth and Breadth, is shown in the opposition of the thick and thin ends of the same tapering line; so where (as in the outmost triangle) the propositional lines are of uniform breadth, it is hereby shewn, that all such opposition is sublated.

11.) It is manifest, that as we consider the Predicate or the Subject, the Breadth or the Depth, as principal, will the one premise of the Syllogism or the other be Major or Minor; the Major Premise in the one quantity being Minor Premise in the other.—Shewn out in the diagram.

12.) But as the First Figure is that alone in which there is such a difference of relation between the Syllogistic Terms,—between the Middle and Extremes; so in it alone is such a distinction between the Syllogistic Propositions realized.—By the diagram this is made apparent to the eye.

13.) In the Unfigured Syllogism and in the Second and Third Figures, there is no difference between the Major and Minor Terms, and consequently, no distinction (more than one arbitrary

and accidental) of Major and Minor Propositions.—All conspicuously typified.

14.) All Figured Syllogisms have a Double Conclusion ; but in the different figures in a different way.—This is well represented.

15.) The Double Conclusions, both equally direct, in the Second and Third Figures, are shown in the crossing of two counter and corresponding lines.—The logicians are at fault in allowing Indirect Conclusions in these two figures,—nor is Aristotle an exception. (See *Pr. An. I.*, vii. § 4.)

16.) The Direct and Indirect Conclusions in the First Figure are distinctly typified by a common and by a broken line ; the broken line is placed immediately under the other, and may thus indicate, that it represents only a reflex of,—a consequence through the other, (*κατ' ἀνάγκην*, reflexim, per reflexionem.) The diagram therefore can show, that the Indirect moods of the First Figure, as well as all the moods of the Fourth, ought to be reduced to merely *mediate* inferences ;—that is, to conclusions from conclusions of the conjugations or premises of the First Figure.—This however (with paragraphs 4 and 8) requires some elucidation.

All Figured Syllogisms, we have said, have a *Double Conclusion*. But as the First Figure approximates most closely in simplicity and perfection to the Unfigured Syllogism, so its Conclusions, as nearest to unity, are *one through the other*,—that is *mediate*, *this is immediate* : whereas in the Second and Third Figures, *both are independent and equal*, one is not before or after the other ; their only difference being, that, by the error of logicians, (not of Aristotle, who left the order free,) that Premise is regarded as the *Major* Proposition, which is enounced,—either *first*, (as by the latter Latins,) or *last*, (as by the Greeks, the older Latins, the Arabians, Jews, &c.) The order of enouncement thus affords no criterion ; it is merely arbitrary. (See p. 697.)—Nor is it competent on this matter to resort to the *Problem* or *Quæsitum*. For such is probably, in itself, unknown, and only, at best, hypothetically surmised as an interrogation of the conclusion, like which, it is therefore also potentially double. There would consequently be here : 1°, a begging of the question ; and 2°, an appeal to the intention of the reasoner, that is, to what, if not

unknown, is a material and extra-logical consideration. Ex facie syllogismi, it is thus always impossible in the Second and Third Figures to distinguish a Major and a Minor, in Terms or Propositions; though we may admit, that if actually enounced, a Problem may actually predetermine the one conclusion or the other, and consequently the relative subordination of the premises.—But, in point of fact, all this is wholly beside the question. An *actual* Problem or an *actual* Conclusion only shows, that in *special relation to it*, one Term and one Proposition is Major or Minor;—it only shows what, with this determinate matter and in this individual reasoning, *actually is*, not what with any matter and in any reasoning, *may possibly be*. It does not expound the Figure *formally* and *generally*. But this was what it behoved to determine. The question is—Do the Second and Third Figures afford us, each a scheme in which, with the same form, with the same matter, *we may employ, indifferently, either of two Problems*; and not, Whether actually choosing one alternative Problem, we should not be limited to the one corresponding Conclusion, with its correlative Major and Minor Proposition. Two great errors of the logicians were, therefore, not to see:—1°, That the Second and Third Figures have *no relatively indirect but two equally direct conclusions*; 2°, That the indirect moods of the First Figure are only the several syzygies or antecedents of this Figure, with *their own immediate conclusion suppressed, and the immediate inference from that conclusion, the mediate inference from themselves, erroneously placed as their indirect, but immediate, conclusion*. But, 3°, a third, more complex and important error, was *their recognition of a Fourth Figure*. This Figure was made out of the indirect—the mediate moods of the First Figure; the premises being held to be transposed. As if, forsooth, transposition of premises causing any syllogistic difference were possible.—Indeed, but for the moods *Fapesmo* and *Frisismo*, *FESAPO* and *FRESISO*, this reduction would have been at once acknowledged by, at least, many logicians, and the Fourth Figure, to speak of that alone, must have thus been virtually cashiered. This, however, has not been effected; and the Fourth Figure, however awkward and unnatural it is felt, (its conclusion, as Averroes objects, being unexpected,) still formally holds its place as a legitimate though crooked scion of the syllogistic family.

To speak, indeed, more particularly touching the Quantification of

the Predicate, and its consequences.—I shall continue the example of these four moods, *Fapesmo* and *Friesmo*, FESAPO and FRESISO, as these more especially afford subject of useful illustration. The former two are indirect moods of the First Figure; the latter two are moods of the Fourth. Of these, the last two are the same as the first two, only the premises (a matter of no account) being relatively, not really, transposed. Now, from a consideration of these moods alone, will appear, not only the convenience but the necessity of admitting and employing the thoroughgoing quantification of the Predicate,—I mean its quantification, both in affirmative and in negative propositions; while therein, also, will be found involved a simplification of the whole syllogistic system, in a degradation of the indirect moods of the First Figure and of all the moods of the Fourth, to mere mediate inferences.

In the *first* place, from an exclusion of this quantification, the logicians have been led to lay down canons for the several Figures, and in particular for the First, which they have been compelled to violate in different ways, in their various and contradictory attempts to reduce these four moods to their schematic proprieties.—But let that pass.

In the *second* place, these and the other indirect moods of the First Figure, with all the moods of the Fourth Figure, ought to have been severally combined and identified; and then, instead of being elevated into a class of immediate and independent inferences, they ought to have been shown out as mere consecutaries, reflexions or sub-conclusions, from the conclusions which these conjugations themselves immediately determine in chief. In relation to the premises, they are mediate results. Were there in these syllogisms no *occult conversion* of an undeclared consequent, no mediacy from the antecedent, they could not in their *ostensible conclusion* reverse the quantities of Breadth and Depth,—they could not therein predicate the subject notion in the premises of the predicate notion in the premises.

But in the *third* place, what is the worst error both in itself and in its consequences,—what, in fact, prevented logicians from long ago recognising the universally mediate character of indirect inference,* is that in these moods it would have behoved them to

* Besides Averroes (Pr. Resol. L. I. c. 8.) I may especially refer to Zabarella in his excellent treatise, De Quarta Syllogismorum Figura. Compare particularly c. 9, sub fine, and the relative place of c. 11.—We have only, I believe, one poor translation of the Exposition, by The Commentator, of the

have acknowledged that the conclusion is, by conversion, an immediate inference from a proposition, on their doctrine, one logically null,—from a *negative proposition with a particular predicate*, (Ani, Ini.) Aristotle, followed by all logicians, has, also, expressly declared, that a particular negative proposition cannot be converted; but if it cannot be converted, far less can it be obtained by conversion.—Let us try. And to take a syllogism in FESAO for the instance :—

No planet is a (i. e. any) comet; (Ana.)

All comets are (some) stars revolving round the sun; (Afi.)

(∴ No planet is some star revolving round the sun;) (Ani.)

∴ Some stars revolving round the sun are no planets.* (Ina.)

Now I maintain, that the proposition within brackets, (Ani,) which to the logicians is even ineffable, stands the *really immediate*, but *unenounced, consequent* of the antecedent; and that the last proposition (Ina,) by the logicians given, as the immediate conclusion of the premises, is only their *mediate conclusion*, being nothing but an inference from their immediate conclusion.—Nay, more; I

Prior Analytics, that, to wit, of Burana; and this I have compared, as printed in the two Venice editions of 1550 and 1560. There seems in this version to be a monstrous error in the very opening paragraph on the subject. The passage and correction are as follows :—" Et ex hoc planum, quod Figura Quarta, de qua meminit Galenus, non est syllogismus, super quem cadat naturaliter cogitatio. Et hoc; quoniam si queramus, an C sit in A, [an A sit in C], et dicamus, C est in A, [A est in C,] quoniam B est in A et C in B, sumus inter duo; aut, ut admittamus, quod sequitur ex ista compositione, [sc. C esse in A,] et rejiciamus hoc quæsitum penitus, quod est C esse in A [A esse in C,] sed [nam] hoc [sc. quod sequitur] est diversum ab eo, quod quærebamus; aut, ut simul cum eo, quod ex hac compositione deducitur, remaneat etiam quæsitum secundum cogitationem nostram, quæ admodum de eo questionem feceramus, id est, ut subjectum in eo sit subjectum, et prædicatum prædicatum."

* A second mediate conclusion—a second immediate inference from the immediate conclusion, might be also drawn, if the "some" be here strictly taken as *definitely indefinite*, (see p. 691); for in this case, we are also entitled to say—"If some stars, &c. are no planets, ∴ Some stars, &c. are (some) planets."—I may also enounce this as an *Unfigured Syllogism*.—"Any Planet" and "Any Comet" are (notions) inconvertible; "All Comets" and "Some Stars revolving round the sun" are (notions) convertible; therefore, "Any Planet" and "Some Star," &c. are (notions) inconvertible."—It will be seen, that the whole difficulty of the conclusion or rather conclusions of the ordinary Figured Syllogism disappears in the Figured, with the quantification of the Predicate; and in the Unfigured Syllogism, moreover, even the plurality of conclusion is recalled to unity.

maintain that the Problem to the above syllogism must be,—“Are the (whole) planets, all the stars revolving round the sun?” For if we turn the ostensible conclusion into a quæsitum,—“Are some stars revolving round the sun no planets?” in this case we could no more immediately employ such premises in subservience to such problem, than from such premises we could immediately infer the ostensible conclusion. There must thus, be an *occult Problem*, as well as an *occult Conclusion*.—But moreover, the syllogism itself is a negative reasoning in answer of this occult, effective, though technically unallowed, interrogative. Unallowed I say; for the counter propositions, in which the question is here, either directly affirmed or directly denied, are, though logically valid, both denounced, as illegitimate, by the expounders of the science. But they could not denounce, as illegitimate, the proximate answer to a question, without proscribing that question itself.—The reasons which determined the logicians to so contracted a view of predication will not stand examining. For, (to speak only of the more obnoxious proposition,—the negative with a particular predicate, Ani,) they are obliged to acknowledge, as *efficient in thought*, a judgment which they yet deny to us the liberty of clothing in words—of logically expressing; as only on the truth and in virtue of this same judgment, is its converse true, and recognised to be true. For, as previously noticed, we cannot *abruptly leap* from the quantity in which we have been proceeding in the antecedent, to the counter quantity, when we come to the conclusion; we must make the transition in a legal way,—we must change the predicate notion into the subject notion;—and how? By a conversion of the immediate conclusion; but conversion is always an *inference*, though an *immediate inference*. This conversion, this Inference, is always, if we reason indirectly, *mentally* performed. In fact, no proposition can be thought as true, if its converse be not thought as true likewise. But what exists and *operates logically in thought*, we cannot but be able *logically to acknowledge and enounce*. This we are entitled to postulate. The erroneous theory, or rather the contracted views, of logicians, in regard to the particular,—to the indefinite quantification of the negative predicate, is thus here found virtually refuted even by their own practice; and it is only requisite for their overt refutation, to make the implicit explicit.—It thus appears that the four syllogisms here specially adduced, like all the other indirect moods of the First Figure, consequently, like all the other moods of the Fourth, are only *mediate* conclusions from conjunctions of the First Figure; therefore, that no

ground whatever is to be found for maintaining the existence of the Fourth, as a Figure, separate and distinct.*

(1853.) Here, I may also say a word or two, in explanation of a matter which has not even been touched upon, so far as I am aware, in any logical system; I mean a conspectus of the various reasons alleged by philosophers, for the distinction of Major and Minor Terms, of Major and Minor Propositions. The various opinions amount in all to *seven*.

* Among my old papers I find the following; which, as it contains an improvement of the many various casts of the common mnemonic verses, and illustrates also the matter on hand, may be here subjoined.—There will be observed:—1^o, Each Figure has its own line or lines. 2^o, The Direct are distinguished from the Indirect Moods; and each class has its several line. 3^o, Finally, the moods of the Fourth Figure, with their character and genesis, are likewise signalled. In other respects, a common, and generally the commonest, name of the Mood, (that, to wit, by *Hispanus*) has been retained; but I do not warrant always its propriety. However, to have improved these designations, by omitting all unmeaning letters, and by marking through the consonants employed, their true reduction,—this, preserving always the metrical form, is impossible, except by approximation, and altogether useless, after superseding the necessity of the reduction itself with the load of rules by which it has been attempted to recall the factitious chaos into order.

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|------|---|--|
| Fig. | { | i.) BARBARA, CELARENT, DABII, FERIO, dato Primæ;
(Hinc <i>Baralip</i> , <i>Celanes</i> , <i>Dabitis</i> , <i>Fapesmo</i> , <i>Friesmo</i> .) |
| | | ii.) CESARE, CAMESTRES, FESTINO, BAROCO, SECUNDÆ. |
| | | iii.) Tertia subsequitur rationum turba,—DARAPTI,
FELAPTON, DISAMIS, DATISI, BOCARDO, FERISON. |
| | | iv.) Ultima, tortum agmen trahit amens Quarta modorum;
(Per <i>Bamara</i> et <i>Camele</i> , <i>Dimari</i> , <i>Ferar[e]</i> , <i>Ferit[e]</i> , <i>clam</i> ,)
<i>BAMARIP</i> et <i>CAMELES</i> , <i>DIMARIS</i> , <i>FESAPO</i> , <i>FRESISO</i> . |

It will be observed, that the supposed illegitimate proposition from which the conclusion in *FESAPO* and *FRESISO* is derived, is marked thus:—[e].

I may notice, when upon this subject, that it was *Melanchthon* who first excogitated, as he thought, the various principles on which proceed the various syllogistic Figures; principles which above a dozen German logicians, previous to *Lambert*, to say nothing of those after him, I find modifying or simply adopting. But the Dutch, French, Italian, and even the older English, authors upon Logic, have, many of them, their speculations on the Philosophy of Figure.

i.) Aristotle undoubtedly had in his eye, when he discriminates the syllogistic terms, a certain diagrammatic contrast of the figures.* Condensing his statements, he says :—"The Middle Term in the First Figure by position lies *intermediate* between the two Extremes ; in figures Second and Third, by position it is placed *out from* the Extremes (*ἐξω τῶν ἄκρων*),—being *first* (i. e. before them) in the Second, and *last* (i. e. after them) in the Third. By position, the Major Extreme is, in the Second Figure *nearest to*, in the Third *farthest from*, the middle. The Minor term in the two latter figures is in position just the reverse of the Major." (See I. Pr. Anal. e. iv. §§ 2, 3, 10 ; e. v. §§ 2, 3 ; e. vi. §§ 2, 3.)

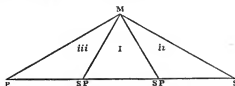
(I may observe parenthetically, what has never been noted, that, in general, it is ambiguous, to which of the counter quantities of Breadth and Depth Aristotle refers ; for in his language *ἐν*, *ἐν ὧν* &c. may be employed, as they frequently are, to express *contained*, by relation either to Breadth or to Depth. Thus, *ἐν ὑπάρχουσιν* or *ἐν ἵσται ὧν* &c. means, either contained *under* a class (Breadth), or *in* a subject (Depth). But from individual passages (e. g. I. Pr. Anal. e. iv. § 10,) it appears that Breadth is the quantity to which alone, in the *present* distinction, he looks ; for the Minor extreme is there defined what is *under* the Middle (*τὸ ὑπὸ τὸ μέσον*) which can well apply, only to this quantity.)

It is not, I think, extremely difficult to reproduce, with almost absolute certainty, Aristotle's Diagrams ; and the following, while they fulfil *all* the conditions of his text, are those which *alone* do so. They are evolved, too, in the simplest, most natural, and even most necessary, manner.

An *Isosceles Triangle, of any kind*, is the central concept. Now,

* Aristotle everywhere manifests his addiction to Mathematics and Geometry ; as is observed especially by his Greek commentators. Ammonius, in his commentary on the Prior Analytics, (Ed. Trinc. f. 17 b,) speaks of the Philosopher as "πανταχθὺ φιλολογιμώτερος ὢν ;" and again, (f. 23 a,) as acting "κατὰ τὸν ζῆλον γεωμετρικόν." Aristotle, in fact, in his evolution of Logic into *Notions*,—*Enunciations*,—*Reasonings*, follows the evolution of Geometry into *Points*,—*Lines*,—*Figures*. He also frequently,—indeed as often as he can, borrows his Logical nomenclature from the language of Geometry ; as, ὅρος, ἄκρον,—διάστημα, πρότασις,—σχῆμα. Even the word Syllogism (*συλλογισμός*) is mathematical,—a computation. Ammonius also, once and again, supposes Aristotle to refer to certain Geometric diagrams, in his exposition of the syllogistic figures ; diagrams, which Pacius thinks to have been lost by the negligence of the transcribers. But see the Philosopher himself, especially in Anal. Post. L. II. c. xvii. § 7 ; and on this the opinion of Pacius is preferable to that of Waitz.

we may either proceed within or without this primary figure. If within; drawing two corresponding lines from the apex to the base, we form another narrower *Isosceles* triangle, and between these equicrurals we have also two counter *Scalene* Triangles of one determinate kind. If without; drawing two corresponding lines from the apex to the produced base, we form another broader *Isosceles* triangle, and in like manner, between the two equicrurals, we have also two counter *Scalene* triangles of the same one determinate kind. Thus :—



Here, the *Isosceles* triangle, whether external or internal, represents the *First* syllogistic Figure; whilst the *Second* and *Third* figures are severally typified in the counter *Scalene* triangles, the *Second*, by that on the right, the *Third*, by that on the left. Separating these triangles, to avoid the crowding of any terminal letters, and also to make the diagrams follow in the order of the syllogistic Figures; simplifying moreover Aristotle's notation of the terms in the several figures by three different series of letters, (appended, however, in the linear representations), and denoting, throughout, the Middle term by M, its initial letter,—the Major by P, and the Minor by S, these last being severally Predicate and Subject in the Problem or Conclusion :—doing this, we have the three following syllogistic diagrams.—Subjoined likewise, is a second series of representations by Lines, which also, in so far as they go, are fully applicable to Aristotle's doctrine.

FIG. I.

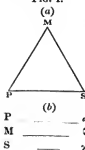


FIG. II.

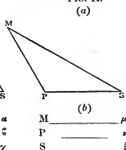
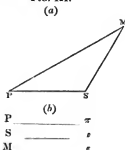


FIG. III.



Here the Middle term, as Aristotle requires, is by position, in the First Figure, *intermediate* between, in Figures Second and Third, *out from*, the extremes; being *first* or before them, in the Second, *last* or after them, in the Third.—The Major extreme is, by position, in the Second Figure *nearest to*, in the Third *farthest from*, the Middle; whilst in these latter Figures, the Minor term holds a position precisely the reverse of the Major.—Further, in the diagrams, the Middle term is always *above*; the Extremes and Conclusion are always *below*; and while the Premises are always at the sides, the Major premise stands on the *left*, the Minor premise on the *right, side*.—In conformity also to Aristotle's modes of enunciation,—the notion Predicated is likewise always *before* or to the left, as the notion Subjected is always *after* or to the right. Consequently, the Middle term in the First Figure, being both subject and predicate, lies perpendicularly between the Extremes; whereas, in the Second, being only predicate, and in the Third being only subject, in these figures it lies severally before and after both Extremes. Aristotle thus denotes by the arbitrary relation of position, the essential difference of subject and predicate; a difference which I distinguish by the simpler and more determinate contrast of the thick and thin ends of a line. On my plan, we are thus enabled to express by any one diagram, and that too of the same form, (be it linear or triangular or circular), all the three syllogistic figures; and to leave the arbitrary relations of position to denote the arbitrary relations arising from the order of enunciation. And that the order of enunciation is absolutely free, as wholly accidental, Aristotle himself professes,—at least practises. But be the defects of his notation from position what they may, that notation, as it is now restored, stands the most ingenious scheme of the kind which has ever been proposed.*

* A set of Diagrams have, from a very ancient date, been presented as Aristotle's, at least as faithfully displaying the Aristotelic doctrine of the Syllogistic Figures; and, with wonderful uniformity, they, and they alone, are to be found delineated in the principal editions of the Organon,—in fact, in the principal treatises of Logic. Simplifying always the terminal notation, they are as follows:—



Aristotle's definition of the several syllogistic terms by their relative *position* did not, however, as was natural, satisfy logicians;

And here it is necessary, in the *first* place, to determine who was the inventor or first promulgator of these famous diagrams; for, strange to say, though this can be precisely ascertained, the utmost uncertainty and error have, up to the present hour, continued to prevail regarding them.

The oldest articulate assertion which I can adduce touching the authorship of these diagrams, is from the Scholia of *Joannes Neomagus* on the *Dialectica* of George of Trebizond, in 1533. Neomagus ascribes them (f. 85) to Faber Stapulensis.—*Faber Stapulensis* himself, however, (whose *Logica Aristotelis* was first published in 1502, and the "*Tertia Recognitio*," from which I quote, in 1531)—Faber states (f. 79) that they were of Greek original,—"*quod Græci figurant*." And while the relative documents were not published till 1535, there can be no doubt that this illustrious restorer of learning had drawn them from manuscript authority.—Though so commonly, so universally, employed since the period of Le Fevre, I find absolutely nothing stated upon the subject of their origin or authorship, by any logician, until the appearance of *M. Barthélemy St Hilaire's* learned work *De la Logique d'Aristote*, Paris, 1838. After describing these diagrams, he says:—"Ces figures se retrouvent dans les plus anciens manuscrits que nous connaissons; c'est des Grecs qu'elles ont passé aux docteurs du moyen-âge, ainsi que les lettres et les mots techniques. Il me semble en outre très probable que ces figures remontent plus haut que les onzième et douzième siècles." (T. ii. p. 340; also his *Logique d'Aristote*, t. ii. p. 13.)—This testimony, the last and most pertinent upon the point, only assigns to these diagrams a conjectural antiquity, "ascending, very probably, beyond the eleventh and twelfth centuries."—They, however, date from the latter part of the fifth century: and they are the work of *Ammonius Hermiae*, (c. 480,) for we may discount *Philoponus*, in whose *Interpolated Commentary* (and the pure *Commentary* of Ammonius is lost) on the *Prior Analytics* they are *first* found; and there they are delivered as original, minutely explained, and assiduously applied to every form of syllogism. "*Διὸ κατὰ μίαν τὸ πρῶτον σχῆμα, ἐπ' αὐτίας γράφεται τοῖς ἀρχαίοις ὁ μῖσος ὅρος· κατὰ δὲ τὸ δεύτερον, ὑπεράνω· κατὰ δὲ τὸ τρίτον, ὑποκάτω*." (F. 17 a.) This *Commentary* was published in the same city (Venice) about the same time (1535, 1536) by Aldus and by Trincavelli; but, however rare and valuable, it has never again been printed in the original. I quote from the latter.

Ammonius (or, at worst, Philoponus,) being found the author of these diagrams, I now proceed, in the *second* place, to consider their value as a restoration of those of Aristotle; and the high authority of Pacinus, among others, may be adduced in favour of this opinion. (See marginal note on his *Organon*, *Post. Anal.* L. II. c. xvii. § 7; his *Commentarius Analyticus* on *Pr. Anal.* L. I. c. ii. § 6; and c. iv. *Introduction*; and less articulately his *Organon*, *Pr. An.* L. I. c. iv. § 4). To this, I think, however, that they can establish no pretension; and the objections thereto are both general and special.

General Objections.—1°. These diagrams have no natural genesis or connection; they are not relative and correlative: they are not evolved as

and accordingly they expounded this terminal relation, "*in or by position*" (τῇ θέσει) as an arbitrary type, representing only a sub-

parts of a single whole.—2°, They are not even of a single species of geometric figure, but of two, and two very different, kinds.—3°, One species of such figure is consequently not simple, it is in fact comparatively complex.—4°, The several diagrammatic figures are also each in a different position.—5°, In them, accordingly, the Middle Term and Extremes, the Premises and Conclusion, do not hold always a relatively similar situation, but on the contrary are in each diagram differently placed.—6°, The notion predicated is not represented as relatively to the subject, always more to the left.—7°, Finally, for the first syllogistic figure, the terms, without authority from Aristotle, are diagrammatically placed upon a level, (ἰσ' ὑψίστης.)

Special Objections.—The representations of Ammonius fail even in reference to Aristotle's articulate requirements. For:—1°, The Middle Term is not, for the syllogistic figures Second and Third, placed "*out from the extremes*,"—2°, The Middle Term is not shewn, for these figures, as "*not middle by position*,"—3°, The Middle Term is not represented, for the same figures, as "*before and after the extremes*," but as above or below these.—4°, And, what is even more precise, what is indeed noticed and acknowledged by Ammonius himself as a variation from "Aristotle's diagram" (f. 23 b), the Major Term is not, in any way, placed "*nearer to*" and "*farther from the Middle*," for the Second and Third Figures, but is always equidistant.

I may now conclude this note with the consideration of a kindred question, —the authorship of the *Greek mnemonic words* for the syllogistic Moods of the various Figures.

In many of the older (not the oldest) editions of the *Organon* by itself, and of the *Organon* in the collected works of Aristotle,—indeed (speaking from memory, for I write this note at a distance from books,) in most if not in all of the editions, from 1520 to 1560; at the end of the seventh chapter (Pacian division) of the first book of the *Prior Analytics*, there are annexed the following words, as if by Aristotle,—as if part and parcel of the treatise.

Τοῦ Πρώτου Σχήματος.—Γράμματα, Ἐγγραψι, Γραφίδι, Τεχνικός.

Τοῦ Δευτέρου.—Ἐγγραψι, Κάτεχε, Μίτριον, Ἀχολον.

Τοῦ Τρίτου.—Ἀπασι, Σθενικός, Ἰσάνις, Ἀσπίδι, Ὀμάλος, Φίριστος.

This insertion is found in no MS., and as a mere editorial interpolation is, in all the critical recensions,—indeed in all the editions, I believe, subsequent to 1560, (for those of Pacius are not the first,) silently omitted. It appears, however, in the editions of the *Opera Omnia* by Erasmus and Grynæus, in all the editions of the *Organon* by Grynæus alone, in that by Strebæus, and, if I remember aright, in the Isengrinian and Juntine texts.

Compared with the original mnemonic lines of Hispatus, the Greek limitation is of the poorest.—1°. It is not in verse.—2°. The consonants do not indicate the moods of the First figure to which the moods of the others fall to be reduced. Thus, in different figures, moods are in many cases expressed by the same significant vowels, whilst the consonants are insignificant.—3°. The notation, consequently, does not point out the kind of conversion

ordination "in nature", "in power" or "in dignity" (τῇ φύσει, τῇ δυνάμει, τῇ δξιώματι). They were not, however, consentient in their several procedures towards this common end.

requisite for reduction.—4°. In one case, in different figures (First and Second) even the same word (ἰγρᾶψι) is employed to mark two several moods.—5°. Half the words commence with vowels.—6°. These have, in fact, ten disorderly initial letters, whereas they begin, in the original, only with the first four consonants.—7°. There is no reason in Greek for the selection of A, E, I, O: these are not, as in Latin, even the four primary vowels; and, as I surmise, Hispanns took the affirmatives A and I, as the first vowels in the Latin *affirmo*, the negatives E and O, as the only vowels in the Latin *nego*.—(The later mnemonic of Eugenios is obnoxious to most of the preceding objections.) In these circumstances, the Greek commutation manifests but little ingenuity, and could easily have been supplied by any editor of the *Organon*. But in what edition it first appears I am not at present able to determine.

Be this however as it may, it is not wonderful that, even by sagacious writers, these mnemonics should be ascribed to Aristotle. Accordingly, this is done, early in the seventeenth century, by *George Downam*, in his *Commentaries on the Dialectica of Ramus*; and the Bishop—the Cambridge Prælector is, perhaps, the most learned of English logicians, and, certainly, not the least learned of the Ramist expositors. (Pp. 438—445. ed. 1669.)

The unhesitating attribution of these Greek names to Alexander of Aphrodisias, though by so distinguished an author as *Nunnesius*, in his treatise *De Constitutione Artis Dialecticæ*, 1554, requires no articulate refutation. (P. 128, orig. ed.)

The only other authority in the question is the recent opinion of *M. Barthélemy Saint-Hilaire*, in the *Memoir* crowned by the Institute, *De la Logique d'Aristote*, 1838. He says:—"L'abrégé de Nicéphore Blemmides est remarquable en ce qu'il emploie déjà, au XIII^e siècle, des mots mnémoniques (Γράμματα, Ἐγρᾶψι, etc.), pour distinguer les figures et les modes du syllogisme, comme les Scholastiques employèrent plus tard *Barbara*, *Celarent*, etc." (T. II. p. 160.) Compare also his *Logique d'Aristote*, (t. ii. p. 13.)—I am sorry to be again opposed on this point to so distinguished an Aristotelian; but, unless the evidence of MSS. can be adduced against me, I must hold, that these words are merely a partial, merely an inadequate conversion into Greek of the far more significant and ingenious *Barbara*, *Celarent*, &c. of Hispanns and the Latin schools,—a conversion executed by some western editor, and fraudulently or negligently interpolated into the text of Aristotle.

I ought to premise, that I am acquainted only with the following edition of Blemmides:—"ΝΙΚΗΦΟΡΟΥ ΒΛΕΜΜΙΔΕ: Epitome Logica. E quatuor manuscriptis Bibliothecæ Augustanæ; operâ et studio Joh. Wegelini, Augustani. Augustæ Vindelicorum; 1605." Wegelin published in a second volume his Latin translation, two years afterwards. The edition of Leipsic in 1784, which is probably only a reimpression, I have not seen.

Now, merely appended to the Greek text of Blemmides by Wegelin, and without any the slightest indication therein that they proceed from the

ii.) *Herminus*, none of whose works have been preserved to us, is, in so far as I know, the earliest logician who speculated upon this point. Holding that Majority and Minority, in terms and propositions, are not merely by position, but by nature; he attempts to find the relative attribute of Major or Minor, especially in the

author, are seen the diagrams of Ammonius, whilst on the margin, and only on the margin, appear also the relative names of the moods, Γεγνηματα, "Εγγεψι, &c. Both of these, be it observed, are omitted in Wegelin's subsequent Latin version.—In these circumstances, there is not, as I conceive, any reason for even surmising, that either diagrams or mnemonics were placed there by the authority of Blemmidas. But it was quite natural, that Wegelin, following the example of a hundred other editors, should there affix both diagrams and mnemonics. (The *diagrams* are thus inserted in both the editions of the combined works of Aristotle and Averroes, in the editions of the *Organon* by Pacins and others, in the Latin translation by Felicianus of Alexander's Commentary on the Prior Analytics, in the edition by Neomagnus of the Dialectic of Trapezuntinus, &c. &c. &c.) They were not however employed by any of the Greek logicians subsequent to Ammonius; though passing observations prove that they were not ignorant of their existence. In fact the example and authority of Faber Stapulensis seems first to have given them currency in the western schools.—The marginal annotation of the Greek *mnemonic words* is still less cogent. These words are undoubtedly of Latin original; for, as I have observed, the affirmative and negative symbols are vowels from the Latin verbs, *affirmo* and *nego*. They are also noted on the margin without any explanation, though this was here peculiarly requisite, had they been original to Blemmidas; they are unknown likewise to any Greek logician, subsequent to Blemmidas, down to the taking of Constantinople; and even the Greek translator of Hispanus (the Pseudo-Psellus) omits, as too difficult, a paraphrase of "Barbara, Celarent," &c., which he would not have done, had he been cognizant of any actual commutation of these words by Blemmidas. And when ultimately, in 1765, Eugenios attempted this, he adapted to the Latin original Greek symbols of his own, apparently ignorant of any previous imitation by Blemmidas, whom, however, he frequently quotes. (The expression "Blemmidas and the Greeks," in note at page 128, is thus incorrect.)—But supposing even that Blemmidas were author of the words, he must be presumed merely a translator; and a translator he well could be, partisan as he was, of the Latin Church, and intimately acquainted with the literature of the West. Even this however is improbable. And what is curious: John Wegelin and Elias Ehinger were contemporaries, townsmen, and friends; both published, from manuscripts in the Augsburg library, logical treatises of lower Byzantines; and if Ehinger did not scruple to father upon Psellus, without the slightest authority, a Greek version of the *Summulæ* of Hispanus, (see p. 128), we need not be slack in believing, that his friend Wegelin should lightly append, like so many editors before him, both the diagrams of Ammonius, and the western commutations into Greek of *Barbara, Celarent*, &c.—But the MSS. should be compared.

Second and Third figures, by a minute, complex, and excursive inquiry into the material relations of the collated notions. His opinions are elaborately recorded by the Aphrodisian, and refuted;—but not on the simple and sufficient ground, that, as material, they are extra-logical. (See Alexander on the first book of the *Prior Analytics*, especially on chapters v. and vi.) *Waitz* sometimes appears to approximate in doctrine to *Hermimus*. See his commentary on the *Organon*, i. 379.

iii.) The next doctrine (I do not say, chronologically) was held by "The Commentators" by pre-eminence,—by *Alexander* and *Averroes*. It maintains that the Major term is the Predicato in the *Problem*, while the subject in the Problem constitutes the Minor. This opinion has obtained many adherents.

iv.) A kindred opinion had, however, perhaps previously, been entertained, for it is explicitly redargued by the Aphrodisian. It holds, that the Major term is what is predicated, the Minor term what is subjected in the *Conclusion*. This theory is held by *Ammonius Hermice*, *Philoponus*, and others; indeed the Problem having been long thrown out of view, this has become the prevalent, if not the exclusive doctrine.

v.) Some, however, and with good reason, combine the last two opinions. This is done by the anonymous Greek author of the treatise "*On Syllogisms*."

What is common to these three opinions (iii. iv. v.), and at the same time of principal importance, is this,—that Aristotle's distinction of the Major and Minor terms by relative position they interpret by their relative dignity, and what he states of these terms *lying closer to, or further from, the Middle term*, in the Second or Third figures, they explain by their *nearer or more remote propinquity to it by nature*. And thus; Aristotle speaking of the Second figure says, that in this form the Major extreme is that which by position lies nearer to the Middle term, the Minor extreme that which by position lies farther from it; this, on their doctrine, means, that the Middle term being predicate in both premises, is more closely allied to that extreme which is once at least predicated, than to the other which is not predicated even once.—In like manner, when speaking of the Third figure, the Philosopher says, that by position the Major extreme is that

which lies farther from, the Minor that which lies nearer to, the Middle term; this they expound, that the Middle term being in both premises the subject, is more akin to that extreme which is once subjected, than to that which is not subjected at all.—This doctrine is best explicated by Ammonius. Stated, long after, by Pachymeres, it is, I see, misapprehended by Waitz, (t. i. p. 387.)

vi.) The definitions by Aristotle (i.) are, if superficially considered, sufficiently arbitrary. But a far more arbitrary doctrine was to be introduced by Boëthius; for he, in opposition even to the Philosopher, who held that either premise might be indifferently enounced first or second, actually defines the Major and Minor term, the Major and Minor proposition, of a syllogism, from the accident of its priority or posteriority in expression. (De Syll. Categ. L. ii. Opera, pp. 592, 593, ed. 1570.) Nor is he even consistent herein. But though arbitrary in itself, and historically contradicted by the practice of the earlier Latins and of all the Greeks and Orientals, (see p. 697,) this opinion obtained, at least a vulgar popularity in the western world, subsequently to the period of Boëthius.

vii.) According to my own view:—1°, The Majority and Minority of the syllogistic terms are determined by the counter quantities of Breadth and Depth; the term which is Major in the one quantity being Minor in the other. According therefore as we regard the syllogism from the point of view of Breadth or of Depth, must we denominate its terms and propositions.—2°, There is, formally or logically, no Major or Minor, be it term or premise, in the Unfigured syllogism or in the Second or Third figures of the Figured; for in these forms, the extremes are either in no quantity or in the same. This distinction, accordingly, is limited to the First figure; and here, either extreme may be Major or Minor, according as we make the one quantity or the other decisive. In subordination to this, the distinction in the counter quantities coincides, *mutatis mutandis*, with the three kindred views previously enumerated (iii. iv. v.), and more especially with the last.

APPENDIX II. LOGICAL.

(B.) ON AFFIRMATION AND NEGATION,—ON PROPOSITIONAL FORMS,—ON BREADTH AND DEPTH,—ON SYLLOGISTIC, AND SYLLOGISTIC NOTATION, &c.

THE present article consists of observations made in reference to a memoir by Professor De Morgan, entitled, "On the Symbols of Logic, the Theory of the Syllogism," &c., read, in February 1850, to the Cambridge Philosophical Society, and published in their Transactions, (vol. ix.) The author, (with whom I had previously been involved in a logical discussion, more, however, of personal than of scientific concernment,) politely transmitted to me a copy of this paper, during the following summer; and the character of its contents induced me, forthwith, to address the following letter to the Editor of the Athenæum. This letter, I was compelled to limit to a single point, in consequence of the others leading me into a field of discussion too extensive: but, as I now find that my observations upon these were more fully written out than I had recollected,—as the unexclusive controversy involves some questions of scientific novelty,—and tends withal to shew of what value are the mathematical improvements of Logic, now proposed; on second thoughts, I here append the whole discussion, with a few verbal amplifications, and two supplementary notes. I regret, indeed, that the necessity of vindicating what, to me, is the cause of truth, should have given to these comments a character so controversial; constraining me to combat, from first to last, the logical speculations of one who ranks deservedly among the highest of our British Mathematicians. In fact, if I be not radically wrong, with the exception of two doctrines,—which are themselves, indeed, only borrowed,—there is not, in the whole compass of Mr De Morgan's "Logical Systems," a single logical novelty which is not a logical blunder. Of other errors, I say nothing. This, Mr De Morgan himself has not only warranted, but called on, me to shew. For, though casting no blame on the aggressive purport of his paper, it will, at least, be allowed, that the attack is from too respectable a quarter not, on my part, to justify,—even, perhaps, to necessitate, a defence: and blame, assuredly, I cast neither on Professor De Morgan nor

on the Philosophical* Society of Cambridge; for the love of truth is always, of itself, polemical, ("Πόλιμος πάντων, καὶ τῆς Ἀληθείας, πατήρ"); whilst reason and experience concur in shewing, that Mathematics and Logic, like Love and Majesty,—

"Haud bene convenient, nec in una sede morantur."

But it comes to this:—If, as has been said, Mr De Morgan's Memoir may represent the Transactions, the Transactions the Society, and the Society the University of Cambridge, then, either is the knowledge of Logic,—even of "Logic not its own,"—in that seminary now absolutely null, or I am publicly found ignorant of the very alphabet of the science I profess. The alternative I am unable to disown; the decision I care not to avoid; and the discussion, I hope, may have its uses.

Edinburgh, 7th August 1850.

SIR,—May I request the favour of being permitted, through your journal, to say a few words on a somewhat abstract subject, and in answer to Professor De Morgan's paper "On the Symbols of Logic," &c., in the volume of the "Transactions of the Philosophical Society of Cambridge," which has just appeared. [Wrong; the volume was not then published.] With that gentleman's logical theories, in general, I should not have thought of interfering; and even his errors concerning my own doctrines I would have willingly left to refute themselves. Not that I entertain a low opinion of Mr De Morgan's talent. In so far as I am qualified to judge, he well deserves the high reputation as a mathematician which he enjoys. But as a writer on the theory of reasoning, I cannot think that he has done his talent justice. I am persuaded, indeed, that had he studied Mathematics as he has studied Logic, and were the members of the "Cambridge Philosophical Society" as competent judges in the one science as in the other,—his character as a mathematician would rank very differently from what it does, nor would their "Transactions" have introduced his logical speculations to the world. It is because

* The *Philosophical* Society of Cambridge ought not, however, to be so entitled, if we take the word Philosophy in the meaning attached to it everywhere out of Britain.—(See above, p. 278.) I may add, as another example, that the recent edition, by the learned Erdmann, of the "Opera Philosophica" of Leibnitz, precisely omits, as non-philosophical, the matters which in Cambridge are styled Philosophy;—to wit, *Physics* and *Mathematics*. *Philosophy* is not, however, formally excluded from the "*Philosophical* Society of Cambridge," as it is from the "*Philosophical* Society of London." Mr De Morgan's paper is an example.

Mr De Morgan has not merely erred himself, but put into my mouth his own rudimentary mistakes; and because, so far from these mistakes being detected when his paper was read and discussed, that paper has been deemed by the Philosophical Society a contribution worthy of publication as a part of its proceedings:—these special causes now principally constrain me to a brief exposition of the unintentional misrepresentation.

The present comments relate exclusively to Mr De Morgan's strictures on my abstract Notation of Syllogistic Forms, a specimen of which has been published by Mr Thomson in his "Outline of the Laws of Thought." But though that fragment contain only affirmations, and of these only the naked symbols, Mr De Morgan excogitating the *negative* forms, translates them into concrete language, according to his conception of what they ought to express; and then, *without a word of explanation, makes me their author.*—Farther: Finding that these expressions, as those which he attributes to logicians in general, are repugnant to "common thought," to "common language,"—he might have fairly added, and to *common sense*, he has swelled a memoir of more than fifty quarto pages with objections to Aristotle's doctrine and to mine; but radically misapprehending both, the illustration of his errors, at once dispels the objections themselves, and therewith the two novel "Systems" reared on the same imaginary foundation.

Mr De Morgan says:—

"The following phrase of Sir William Hamilton's system, '*All A is not some B,*' [!] is very forced, both in order and phraseology; one who sees it for the first time finds it hard to make English or sense of it. The meaning is, '*Each A is not any one among certain of the B's,*' [!] and in its place in the system alluded to, the uncount expression helps to produce system, and the perception of uniform laws of inference."—(P. 5.) And again: "The logician, who must have forms, has to make a choice, and he has invented *cumular* expressions which do not suit the genius of common thought or common language. '*All man is not fish,*' [!] is the form in which a logician denies that any man is a fish. Sir William Hamilton says, '*All man is not all fish,*' [!] Common language would deny the first by saying, '*No, nor any part of him.*' Even '*All men are not fishes,*' only means, in common language, '*Some men are not fishes,*' with emphasis upon the great number that are implied to be so; and would therefore be held false. The predicate of a negative must be *exemplar*: it is, '*Every man is not any one fish.*' [!] The examination of the following table will show that there is much less forcing of common expression in a list of nothing but *exemplars* than in a list of nothing but *cumulars.*" [!]"—(P. 24.)

This attribution of certain phrases for certain forms of predica-

tion to the logicians and to me, is a mere imagination by Mr Do Morgan. I admit, that had we thus spoken, we had spoken, not only ungrammatically, but nonsensically. This, however, we have not done; and Mr Do Morgan's imagination of the fact, is the result of a strange oversight on his part of the commonest principle and practice of common logic and of common language. For language is logical in its forms; and a logic which cannot be unambiguously expressed in language, is no logic at all. Logic, Language, and Common Sense are never at variance. Mr De Morgan, I say, curiously misunderstands the nature—the contrast of Affirmation and Negation, and the counter expressions in which that contrast is embodied by language. I regret to tarry for a moment on a point so elementary; but, as the mistake is of that very point, it is necessary to state, what I feel it irksome not to suppose known—at least instinctively. Known, however, scientifically it often is not; and as the principle has never been developed, I may, at once, correct Mr De Morgan, and explain it.

Mr De Morgan's error is twofold; and of these again each is compound.

1°. He thinks, that in *universal negation*, the logicians employ the predesignation "*all*,"—which they do not; and do not employ the predesignation "*any*,"—which they regularly do. On this complex reversal of the fact, he fancies an obnoxious "*System*,"—wars strenuously against the hostile phantom,—fathers it on others,—and finally adjudges it to righteous condemnation, by the style of "*CUMULAR*."

2°. He thinks, that the predesignation "*all*" can be superseded, and the predesignation "*any*" applied to *universal affirmation*;—both erroneously. From the conjunction of these two impossibilities, the new-born "*System*" is engendered, which he fosters as his own, and fondly baptizes by the name of "*EXEMPLAR*."—But these errors must be further explained.

To speak, then, of *Affirmation* and *Negation*.

In *result*.—Affirmation is *inclusion*, and universal affirmation, absolute inclusion—the inclusion of a *definite this* or *all* (individual or class); Negation is *exclusion*, and universal negation, absolute *exclusion*—the exclusion of a *definite this* or *all* (individual or class). (Laying individuals aside):

In *process*.—Affirmation proceeds downwards or inwards, from greatest to least, from the constituted whole to the constituent

parts; Negation, upwards or outwards, from least to greatest, from the constituent parts to the constituted whole.

The counter *qualities* are also contrasted, in and as the two counter *quantities*.—In proportion:—to *Depth* or intension, is affirmation; to *Breadth* or extension, is negation.—At the *maximum* of *Breadth*, there is predicated:—by Affirmation, the least of the most, (that is, there is given the fewest attributes to the greatest number of things);—by Negation, the most of the least, (that is, there is withdrawn the greatest number of attributes from the fewest things). Hence:—To posit the Genus, is not to posit the Species and Individual; but to sublate the Genus, is to sublate the Species and Individual.—At the *maximum* of *Depth*, there is predicated:—by Affirmation, the most of the least, (that is, there is given the greatest number of attributes to the fewest things);—by Negation, the least of the most, (that is, there is withdrawn the fewest attributes from the greatest number of things). Hence:—To posit the Individual, is to posit the Species and Genus; but to sublate the Individual, is not to sublate the Species and Genus.—[See Table, p. 696.]

Now, from the higher view of an *abstract or scientific Notation*, which regards and states only the *result*; Negation appears as a positive and irrespective act—an act of *exclusion*. Here, all the signs of affirmative and negative quantity *are the same*; what is absolutely included or excluded is—ALL.

On the contrary, from the lower view of *concrete or common Language*, which is conversant about the *process*, Negation (what its name expresses) shows only as a privative and correlative act,—as the undoing, as the reversal of inclusion or affirmation. Here the predesignatory words for universally affirmative and universally negative quantity *are not the same*. In ordinary speech we say:—for absolute affirmation, *all is*, &c.: for absolute negation, *not any* (or *none*) *is*, &c.; thus accomplishing the *exclusion* of ALL through the *non-inclusion* of ANY. To use, in common language, the *same verbal* predesignation of quantity for an affirmative, as for a negative, universal, would be, in fact, to do nearly the opposite of what is intended to be done. Every logician knows explicitly, as every unlearned man knows implicitly, that naturally, and in common language, the negation of a universal affirmative predesignation yields only a particular negative, as the negation of a universal negative predesignation yields only a particular affirmative. The logician, therefore, to designate a Univer-

sal Affirmative, familiarly uses "*all is*," "*all are*;" the "*all*" (πᾶς, πάντες, omnis, omnes, &c.) containing under it, and therefore meaning,—sometimes collectively, "*whole*," &c. (ὅλος, ὅλοι, ἅπας, ἅπαντες, σύμπας, σύμπαντες, totus, toti, cunctus, cuncti, universus, universi, &c.)—sometimes distributively, "*every*," "*each*," "*each several*," &c. (πᾶς τις, ἕκαστος, ἕκαστός τις, πᾶς ἕκαστος, πάντες ἕκαστοι, ὅστις οὗν, πᾶς ὅστις, πάντες ὅσοι, quisque, unusquisque, singulusquisque, &c.): and for a Universal Negative, (eschewing "*all is not*," as at best ambiguous,) he employs "*no or none (not one) is*," "*not one is*," "*any is not*," &c. (οὐδὲς, μηδὲς ἵστι, nullus, ullus non, non or ne aliquis, non quisquam, non quispiam est, &c.) To quote my version of the "*Asserit A*," &c., a version with which Mr De Morgan may be acquainted:—

"A, it affirms of *this, these, all*,

Whilst E denies of *any*," &c.

In this, common logic and common language (from which last many curious illustrations might be given) are at one. As a single example:—the Latin *ullus* (a word in which that tongue is, in this instance, richer than the Greek, which has nothing, at least, better, than the ambiguous *τις, τις πω*.) affords a beautiful illustration. *Ullus* (unnullus,) any; *ullus non, nullus* (non or ne ullus, οὐδὲς, μηδὲς,) not any, none; *nonnullus* (non nullus,) not none, some; *nullus non, none not, all*. So, *nemo*, (ne homo); *non nemo*; and *nemo non*. So, *nihil*, (ne hilum); *non nihil*; and *nihil non*. Nor need there be an end of instances in any language. The Hebrew is, in fact, so far as I am aware, the only tongue which does not always discriminate unambiguously, and by verbal contrast, the affirmative from the negative universal, though one tongue may certainly do this more deftly than another.

Now, the predesignation of *universal negation*, which Mr De Morgan marvellously makes "the logician" to employ, nay even to have "invented" for himself, as a technical expression,—this predesignation, (in his example—"All man is not fish," in mine—"All men are not blackamoors,") is in LOGICAL, as in ordinary, language, *not a universal* at all, but a *particular negative*—a mere denial of omnitude—tantamount, therefore, it should be, to a *particular affirmative*. Οὐ πᾶς ἵστι is, indeed, the common expression of Aristotle and the Greek logicians for "some is not," [*"Some is"* should, however, have been held its direct and natural result; for, as we shall see, two particulars in the affirmative and negative forms, ought to infor each other. Compare p. 688, sq.—If

Mr De Morgan, therefore, can name (as I know may be done) *any* writer on logic who employs the expressions thus attributed to *all* logicians, Mr De Morgan is heartily welcome to treat the blunderer as he may deem his ignorance to deserve.—So much for “the logician.”

As for myself :—The language I use is that of the logicians ; only the quantity of the predicate, contained in thought, is overtly expressed, whereas, in common language, followed by common logic, that quantity is, though never null, usually, merely understood. Therefore, reversing the expression of “the logician,” Mr De Morgan naturally reverses mine ; but the distorted nonsense which he lays to my account is, I am assured, only what he conceived a fair version of my abstract notation. As all, however, that has been said of Mr De Morgan in relation to the logicians in general, equally applies to him in regard to me in particular, any special refutation would be superfluous.

So much for Mr De Morgan's mistakes about “the *Cumular* System,” laid to the logicians and myself. I proceed to the counter scheme, his own “*Exemplar* System,” proposed in supplement and correction of the other, and founded, as said, on the employment of the predesignation “*any*” as a *universal*, not only in negative, but also in *affirmative*, propositions.

Our English “*any*” (aenig, anig, Ang.-Sax.) is of a similar origin and signification with the Latin “*ullus*” (unulus), and means, primarily and literally, (*even*) *one*, (*even*) *the least or fewest*.—But now, to speak with the schools, it is of quodlibetic application, ranging from least to greatest ; and (to say nothing of extra-logical modes of speech, as interrogation, doubt, conditioning, extenuation, intension, &c.) is exclusively adapted to *negation*. For example.—We can say as we can think, *affirmatively* :—“All triangles are all trilaterals ;” this collectively,—“The whole (or class) triangle is the whole (or class) trilateral ; this distributively,—“Every (or each several) triangle is every (or each several) trilateral.” Now, let us try “*any*” as an *affirmative* :—“Any triangle is any trilateral.” This is simple nonsense ; for we should thus confound every triangle with every other, pronouncing them all to be identical. Nor, in fact, does Mr De Morgan attempt this. He wisely omits the form. But what an omission ! Still, however, the “*Table of Exemplars*,” which he does present, (p. 25,) stands alone, I am persuaded, in the history of science. And mark, in what terms it is ushered in :—as “*a system of predication free*

from the objections urged against the cumular forms, as far as contradiction is concerned," nor, like them, "unsuited to the genius of common thought or common language." Nay, so lucid does it seem to its inventor, that, after the notation is detailed, we are told, that it "*needs no explanation.*"

Now, then, let us take, as our first specimen of this "System," the fifth proposition of the Table,—“Some one X is any one Y;” and applying this form, by interpretation, to a concrete matter, we have,—“Some one figure is any one triangle,”—“Some one animal is any one man.” Here, however, the proposition is in terms absurd; nor does it even express what it is intended to mean. For not *any*—for not *any one*—for no *one* figure is *any* or *any one* triangle.

Again, as our second specimen, taking the first proposition of the Table,—“Any one X is any one Y.” This, we are told, “gives” or is supposed to mean,—“There is but one X and one Y, and X is Y.” But it means—it can mean nothing of the kind; it is only doubly unmeaning, or doubly contrary to all meaning. For, in the first place, “*any*” and “*any one*” necessarily imply that there are *more—more than one*; and, in the second, the whole proposition becomes, on such hypothesis, absurd. This “Exemplar” proposition is, however, a favourite with Mr De Morgan, who thinks it to afford “a conclusion not admissible in the Cumular form” (p. 26). So long as the proposition remains void of sense, this is true; not certainly if interpreted into meaning.

Finally, however, the inconsistency of the “Exemplar System” is sufficiently shown in this,—That its propositions, even when not immediately suicidal, do not admit of any rational conversion. Thus, the sound, without sense,—the proposition first adduced, is the verbal converse of another which, by chance, is not self-contradictory; to wit,—“Any one Y is some one X,”—“Any one triangle is some one figure,”—“Any one man is some one animal.” The reason is obvious. “Any” contains *in it* “some,” “some” contains *under it* “any;” “some” is the less definite, the genus, “any” is the more definite, the species; “any” is always “some,” some is not always “any.”—The absurdity is, however, carried to a climax, through Mr De Morgan’s formal limitation of the several quantities by “one.”

But enough!—Mr De Morgan gravely propounds all this as “*sense and English,*”—as in honourable contrast to the uncouthness and violence and contradictions of the “Cumular System.”

He certainly does not mean to turn logic into ridicule ; but, assuredly, if logic were responsible for the " forms " and " systems " thus seriously proposed, it would no longer be respectable enough even for a jest.—" This notation," says Mr De Morgan, " needs no explanation." Right !—

" Emendare jocos, sola litra potest."

The more special objections of Mr De Morgan—one and all—it would be equally easy to refute ; but whilst the part, now considered, of his paper is a fair specimen of the whole, I am unwilling to trespass farther on your indulgence, by discussions of so limited an interest.—I remain, &c.

W. HAMILTON.*

I have now signalised Mr De Morgan's general and gigantic error, that on which is founded the correction he proposes of all former Logic ; and proceed to consider his special criticism of my peculiar scheme of syllogistic and propositional forms.

And here I may subdivide Mr De Morgan's objections into *two* classes ;—the first containing those *to the general principle of my scheme*,—the second, those *to this or that of its individual doctrines*.

I.—Under the *former* head there are *two* objections. Of these :—

* To this Mr De Morgan made the following answer ; and on the one point to which it is limited, assuredly, he is as completely right, as I am completely wrong.

" There is but one of what I call Sir W. Hamilton's misapprehensions which I shall notice now,—and that only to prevent your readers from making fruitless inquiries. He states that a volume of the ' Cambridge Philosophical Transactions ' has recently appeared. This I am pretty certain is not the case. The copy of my memoir which I had the honour to forward to him was one of the extra copies which the courtesy of the Society allows to its contributors as soon as their several papers are printed. The paging, by which Sir W. Hamilton cites, shows that he used that copy, or one of the same issue ;—this paging of course, will be altered when the paper takes its place in the volume.

" The rest of Sir W. Hamilton's letter I shall dispose of, so far as I deem it necessary, if I live to publish another edition of my work on Logic.—I am, &c.

" A. DE MORGAN.

" UNIVERSITY COLLEGE, August 26, 1850."

1.—The *first* is supposed, — is assumed, without even an attempt at proof; it requires, indeed, merely to be stated, to be refuted.—“Section iv.” of Mr De Morgan’s Paper is entitled :—“On the Symbolic forms of the system in which all the combinations of quantity are introduced by Arbitrary Invention of forms of predication;” and it commences :—“This system belongs to Sir William Hamilton, &c.”—Now, in applying the term “*arbitrary invention*” to this scheme, Mr De Morgan has either gone too far, or not far enough. For if “the forms of predication” exist in thought, then is their expression in logic *not* an “*arbitrary invention* ;” whereas, if they do not exist in thought, then is their expression in logic, *not arbitrary*, but *false*. To have proved the latter would, indeed, have pricked the “*punctum saliens*” of my system. But not attempting this, Mr De Morgan now virtually admits his own thesis to be absurd; even had he not, in fact, *previously* recorded his formal acknowledgment, *that the predicate has its quantity in thought*. Why then did he insinuate, what, he knew, could not be maintained?

2.—The *second* of the two objections under this head is to the want, or insufficiency, in my doctrine, of a general Canon of Inference; for the exceptions, it is argued, are not regulated by, and do not manifest, the rule. (P. 13.)—Of all objections, none can be more curiously infelicitous than this. In the doctrine referred to, there is a *rule*, and *no exceptions*. The rule there governs everything; everything is governed by the rule.—But, opposed to my canon, which, not having studied, he does not understand, Mr De Morgan propounds the following :—“*Erase the symbols of the middle term, the remaining symbols show the inference.*” (Pp. 7, 11, 18, 26, &c.) This canon Mr De Morgan ought not to have given as his own. It is that of Ploucquet :—“*Deleatur in præmissis medius; id quod restat indicat conclusionem* ;” and on this canon Ploucquet established his “*Logical Calculus*.”—Calculus and Canon have, however, long been rejected by the German logicians, as mechanical and useless. Hegel even pronounces :—“This, as a discovery and improvement in Logic, is the bitterest libel that was ever vented against the science.” But worse than useless and mechanical, it does not hold good; for, though valid in the Aristotelic system, it breaks down in a fourth part of the thirty-six moods emerging under my doctrine of syllogism. “*Transeat ergo.*” But has not Mr De Morgan con-

founded the *exceptions* to Ploucquet's canon, with the *no exceptions* to mine? *

II.—Under the *second* head there are *six* litigious points.

I shall first consider the objections to the *propositional forms*, which I have peculiarly adopted. But it is proper to premise a general enumeration of these; and in the following table, the Roman numerals distinguish such as are recognised in the Aristotelic or common doctrine, whereas the Arabic cyphers mark those (half of the whole) which I think ought likewise to be recognised.†

AFFIRMATIVES.

- | | | | |
|--------------------|--------------|--------------|-----|
| 1.) Toto-total | = AFA = All | — is all —. | |
| ii.) Toto-partial | = AF1 = All | — is some —. | (A) |
| 3.) Parti-total | = IFA = Some | — is all —. | |
| iv.) Parti-partial | = IF1 = Some | — is some —. | (I) |

NEGATIVES.

- | | | | |
|-------------------|--------------|------------------|-----|
| v.) Toto-total | = ANA = Any | — is not any —. | (E) |
| 6.) Toto-partial | = AN1 = Any | — is not some —. | |
| vii.) Parti-total | = INA = Some | — is not any —. | (O) |
| 8.) Parti-partial | = IN1 = Some | — is not some —. | |

The preceding eight Propositional Forms, I may also add, are illustrated by the following six Diagrams,—(if *Definitely Indefinite*. for if *Indefinitely Definite* (see p. 688, sq.) they require a series of more artificial and complex lines.) The identity of Subject and Predicate is marked and measured by the co-extension of the two lines below and above each other; the non-identity, by the converse. The rationale of the letters is manifest; and it is likewise manifest, that this principle of notation may be carried out into Syllogistic.—Proposition (1) is illustrated by Diagram (a); (ii)

* Mr Thomson (*Laws of Thought*) seems to have fallen into a similar inaccuracy; not perhaps considering, that the disconformity in quantification of the extremes, as they appear in the antecedent, and in the conclusion, is, in my doctrine, not an exception to, but a consequent of, the canon.

† In the literal symbols, I simplify and disintegrate the scholastic notation; taking A and I for universal and particular, but extending them to either quality, marking affirmation by F, negation by N, the two first consonants of the verbs *affirmo* and *nego*—verbs from which, I have no doubt, that Petrus Hispanus drew, respectively, the two first vowels, to denote his four complications of quantity and quality. These I have appended.

by (b); (3) by (c); (iv) by (d); (v) by (e); and (8) by (f): but (6) is shown by (b and d); as (vii) by (c and d). Proposition (8), indeed, though it have its special diagram (f), quadrates with all the others.

AFF.	AFF. & NEG.	NEG.
	b) C — B — • • •	e) Z — N —
a) D — Δ —	c) B — C — • • •	f) A — E — • • • e e e
	d) C — K —	

Of the four propositional forms specially recognised by me (1, 3, 6, 8), Mr De Morgan questions only two: one affirmative and one negative, being the first and the last,—the *toto-total* affirmation, the *parti-partial* negation.* In quoting Mr De Morgan's "objections to this system as promulgated by Sir William Hamilton" (p. 22), I shall substitute for his symbols his own translations of them into common language.

1.—*Toto-total Affirmation.* To this form Mr De Morgan makes two objections: the first, that it is complex; the second, dependent upon the first, that it cannot be denied by a simple proposition. Of these objections in their order.

First Objection.—"First, the fundamental propositions of a logical system should be independent of each other, so that no one of them should be a compound of two others. Now 'all Xs are Ys,' or 'X and Y are identical names,' is really compounded of 'All Xs are some Ys,' and 'Some Xs are all Ys.' If we once grant a complex proposition, why this one only, when there are others, out of which, as I have shewn, a separate system of complex syllogism may be constructed?—To say that the mode of inventing propositions yields no other, is not an answer; for it is the mode itself which is attacked in its results. Every syllogism in which 'All is all' occurs, is either a strengthened form, or the resultant of two other syllogisms."

The purport of Mr De Morgan's reasoning in this passage is, that the form "All Xs are all Ys" is merely the compound or resultant of two simple or original forms—"All Xs are some

* Mr De Morgan and Mr Thomson, herein, partly agree, partly differ. They differ in regard to *toto-total affirmation* (1), which the former denies, while the latter allows. They differ also about *toto-partial negation* (6), which Mr Thomson refuses, but Mr De Morgan apparently admits. They both agree, however, in rejecting *Parti-partial negation* (8). See p. 692.

Ys," and "Some Xs are all Ys." This is manifestly erroneous, looking no farther than to the text of Mr De Morgan himself.

In the *first* place, the proposition "All Xs are all Ys" is said to be compound, in contrast to two other propositions its constituents. But how "All Xs are all Ys" is a proposition more complex than "All Xs are some Ys," than "Some Xs are all Ys," or even than "Some Xs are some Ys," I confess myself wholly unable to imagine. Mr De Morgan does not pretend that the predicate has no quantity; but how one quantity can be more complex than another,—how *All* should be compound, and *Some* simple, he has not attempted to explain.—Nay more. He formally admits, that a proposition with its *predicate universally*, and its *subject particularly*, quantified, is *simple*; as, in like manner, a proposition with a particular predicate and a universal subject: and yet, in the same breath, he coolly assumes, (for he propounds neither argument nor explanation,) that a proposition with its subject and predicate each universally quantified is complex! But if "Some figure is all triangle" be a simple proposition, is it possible to conceive, that "All triangle is all trilateral" should not be a simple proposition likewise? It seems, that *some* and *all*, *all* and *some*, *some* and *some*, are each elementary, whilst *all* and *all* is alone derivative!

But in the *second* place, this inconsistency is eclipsed by another; for Mr De Morgan not only maintains that the proposition "All Xs are all Ys" is compound, but, though itself confessedly valid, *compounded of two impossible* propositions,—“All Xs are some Ys,” and “Some Xs are all Ys;”—in other words, that “All triangle is all trilateral” is the combined result of “All triangle is some trilateral,” and “Some triangle is all trilateral.” But, unless *some* be identified with *all*, if either of the latter propositions is true, the other must be false;—nay, in fact, if either be true, the very proposition which they are supposed to concur in generating is false likewise.* Mr De Morgan proceeds:—

* See p. 687, sq.—In confirmation of the above, I am happy to adduce the following testimony by a very able logician, Mr Mansel:—"Psychologically as well as logically, we believe that Sir William Hamilton is right in maintaining 'All A is all B' to be a single judgment, in opposition to Mr De Morgan, who exhibits it in the complex form, 'All A is B, and All B is A;' thereby accepting the second horn of the above dilemma, since 'all A is some B and all B is some A,' would be a self-contradictory assertion." And in a note:—"A curious inconsistency may be remarked in the theory of the com-

Second objection.—"Secondly, one object of *formal* logic being to provide form of enunciation for all truth, and form of denial for all falsehood, it is clear that every falsehood which can be enunciated as a truth should be deniable within the forms of the science. Now the simple denial of '*All Xs are all Ys*' is the disjunctive assertion, '*Either no Xs are some Ys, or some Xs are no Ys.*' Though it happen that I can prove one of these to be true, without knowing which, yet the power of denying in an elementary form the elementary proposition, '*All is all,*' is refused me. A philologist asserts the Greek words *A* and *B* to be identical in meaning: he says '*All A is all B.*' One passage of Homer, and one of Hesiod, both contain the doubtful word *C*, having two possible explanations, the first of which makes Homer assert that *some As are not Bs*, whilst the second makes Hesiod assert that *some Bs are not As*. The premises being admitted, the resulting denial of the *simple proposition* of Sir William Hamilton's system is only obtainable by a *dilemma*, or, as it were, *metasylogism*."

Before proceeding to consider Mr De Morgan's argument in this paragraph I must say a word upon his language. By "denial," "deniable," &c., he must mean *contradictory* denial, *contradictorily* deniable, &c. This opposition alone affords a single pair of propositions, and the one alternative of truth or falsehood; and he apparently rejects *contrary* denial. The word *contrary* he however commonly employs for *contradictory*. But *contrary* opposition emerges, when a plurality of propositions can severally deny the original enunciation, but where each, though not all of these, may be false. This being noted, I go on.

In the *first* place, Mr De Morgan's reasoning is inapplicable. An enlarged system is not, as he himself admits, (p. 20), to be criticised by the laws, far less, then, by the accidents, of an unenlarged one. It may be quite true, that the four propositional forms of the Aristotelic scheme has each its contradictory opposite; but it by no means follows, that the same accident should attend every legitimate amplification of that scheme. It is suffi-

plex proposition, when placed in antagonism to that of the quantified predicate. I cannot assert '*all A is B and all B is A,*' without having thought of *A* and *B* as co-extensive, *i. e.*, without having made the judgment '*all A is all B.*' If we know the quantity of the predicate, we are of course entitled to state it. The complex proposition is only preferable on the supposition of our ignorance, a supposition which annihilates the complex proposition itself. If the assertion, '*all A is some B and all B is some A*' be suicidal, is there more vitality in '*all A is (I know not how much) B, and all B is (I know not how much) A?*' But the question, to be fully discussed, must be treated on psychological as well as logical grounds. Logic deals with the judgment as already formed; psychology inquires what is the actual process of the mind in forming it."—(North British Review, vol. xv. p. 116.)

cient, that every competent assertion should have its competent denial.

But, in the *second* place, in point of fact, the Aristotelic *contradiction* only proceeds on a certain arbitrary hypothesis of particularity; to wit, that "some" is to mean only "*some at least*," (possibly therefore, *all* or *none*,) thus constituting, both in affirmation and in negation, virtually a double proposition,—a proposition comprising, in effect, *two contraries*.*

In the *third* place, however, the proposition is,—in truth contradictorily deniable; for every legitimate affirmation must admit of a legitimate negation. But negation and affirmation must be con-

* I have here, and once before (p. 688) criticised Mr De Morgan, not on Aristotelic principles. It is but fair that I state articulately the grounds.

All *particularity*, all "some" is, generically, indefinite; but one particularity is of one indefinitude, another is of another. In short, to apply the technical formula of Specification (p. 695) in its highest simplicity—in its most repulsive nakedness:—*some Some is not some Some*. For, so to speak, of "some," one species denotes *indefinite definitude*; whilst another denotes *definite indefinitude*. And why? The former species not definitely excluding the definite,—the "all" and "none," is therefore, at once, in different respects, indefinite and definite, that is, *indefinitely definite*; whilst the latter, definitely excluding the definite,—the "all," the "none," is, therefore, at once, in different respects, definite and indefinite, that is, *definitely indefinite*.

1° In the sense of INDEFINITE DEFINITUDE.—*Affirmatively*: "Some" means "some at least,—some perhaps all;" that is, "some," itself always indefinite, but not definitely exclusive of the *definite*, "all."—*Negatively*: "Not some" means "not some, at least,—not some, perhaps none;" that is, "not some," itself always indefinite, but not definitely exclusive of the definite "not any," or "none"—"AT LEAST" is the watchword of this system, in affirmatives as in negatives. (I may notice that the *ὅτι πᾶς* of Aristotle and the Greek Logicians is hardly conformable to this kind of indefinitude.)

2° In the sense of DEFINITE INDEFITUDE.—*Affirmatively*: "Some" means "some at most,—some not all,—some only;" that is, "some," itself always indefinite, but *definitely* exclusive of the definite "all."—*Negatively*: "Not some" means "not some, at most,—not some and yet not none,—not some, only;" that is, "not some," itself always indefinite, but *definitely* exclusive of the definite, "not any," or "none."—"AT MOST," both in affirmative and negatives, is the watchword of this system.

Of these several meanings of "some," all the world has been, at least implicitly, never unaware; and of the two, the latter is certainly the more prominent. This enhances the marvel, that the former only has been explicitly developed and formally generalised by Aristotle; but what Aristotle failed to do, has been left undone by subsequent logicians. The two different meanings afford, however, in many cases two different results, as well in the relation of *Impossibility*, as in the relation of (immediate) *Inference*: and

tradictorily opposed; as Aristotle has expressed it,—“*Between affirmation and negation there is no mean.*” Yet it does not follow that the denial should rest on a single alternative case,—on a contradictory proposition. For it may well be, that a denial is supported only on one or other of two impossible contraries; but it will be valid if one or other of the contraries be true. In the present case, the proposition, for example,—“All (class, whole, overy, &c.) triangle is all (class, whole, overy, &c.) trilateral,” is contradictorily denied by the proposition,—“All (class, &c.) triangle—is not—all (class, &c.) trilateral,” in the sense,—

what is worse, even than the exclusive consideration of a single meaning, is, that Inference and Impossibility (especially by the logicians after Aristotle,) have, in that single meaning, been jumbled together under the barren and ambiguous head of *Opposition*.

But worst of all; in fact, the one meaning considered exclusively by Aristotle and the logicians, has, only improperly, an intralogical, formal, objective significance. It is not a necessity, either of thought or of things, but merely an accident of the former. Its *peculiar* indefinitude is a contribution from the contingency of our Ignorance, and with our Ignorance would disappear; for, (to say nothing of *Individuals* or *Individualised Generals*,) in reality and in thought, every quantity is necessarily either *all*, or *none*, or *some*. Of these the third presents the *only formal indefinitude*; and it is formally *exclusive* of the other two. The double inadvertence, as I think, of Aristotle, (An. Pr. I. 2.) in recognising the *indesignate* (ἀδιόριστος) to be at once a quantity and an indefinitude, (for the Indesignate is thought, either precisely, as whole or as part, or vaguely, as the one or the other, unknown which, but the worse always presumed);—this vagueness,—this material, subjective and contingent indefinitude, lay at the root of his whole doctrine of Particularity, the indefinitude of which quantity he should have kept purely formal, objective, and necessary, instead of confounding the two indefinitudes together. Thus by mixing up the material with the formal,—what was *indefinitely thought* with what was *thought as indefinite*, Aristotle (to say nothing of other consequences) annulled all inference of, what I would call, Integration. On his doctrine we are not warranted, from the proposition—“Some dogs are all barking animals,” (“Quoddam caninum est omne latrans,”) to infer the proposition—“Some dogs do not bark,” (“Quoddam caninam est nullum latrans”)—But I am lapsing into discussion.—We must therefore have two Tables: one for Impossibility, another for Inference; and under each, we must distinguish the result on either system of particularity. At present I can merely append the compound Table, (see following page); and shall only say, that a better, though a more elaborate, plan of showing the various correlations of the several pairs of propositions, is to write all the eight on the phases of octagonal diagrams, and then to connect them by different lines (thicker, thinner, waving, broken, dotted, &c.) representing, in the different systems, their mutual dependencies.

"This proposition, 'All triangle is all trilateral,' is untrue." And such, in the present form, is comparatively safe; for there being

TABLE OF THE MUTUAL RELATIONS OF THE EIGHT PROPOSITIONAL FORMS ON EITHER SYSTEM OF PARTICULARITY. (FOR GENERALS ONLY.)

Number and Quality.	Value.	Common to I. and II.—In either of which all Propositions are related Of these three		I. Incompossibility of Proposition with Proposition, on the System of		II. Inference from Proposition to Proposition, on the two Systems.	
				1. Indefinite Definite. (Some at least.)	2. Definite Indefinite. (Some at most.)	1. To wit, from—	2. Indefinite Definite. (Some at least.)
Affirmat. I—ii I—3 I—iv ii—3 ii—iv 3—iv	Afa — Afi Afa — Ifa Afa — Ifa Afi — Ifa Afi — Ifa Ifa — Ifa					I—ii I—3 I—iv ii—iv 3—iv	Restr. un. Restr. un. Restr. bi. Restr. un. Restr. un. Restr. un.
Negat. v—6 v—vii v—8 6—vii 6—8 vii—8 Aff. Neg.	Ana — Ani Ana — Iai Ana — Iai Ani — Iai Ani — Iai Iai — Iai					v—6 v—vii v—8 6—8 vii—8	Restr. un. Restr. un. Restr. bi. Restr. un. Restr. un.
Aff. Neg.	Afa — Ana Afa — Ani Afa — Iai Afa — Iai Afi — Ani Afi — Iai Ifa — Iai					1—8 ii—6 ii—8 3—vii 3—8	Res. & Int. bi. Integr. un. Res. & Int. un. Integr. un. Res. & Int. un.
iv—8	iv—8					iv—6, 6—iv iv—vii, vii—iv iv—8, 8—iv	Res. & Int. un. Res. & Int. un. Integr. bi.

ABBREVIATIONS:—bi. = bilateral; cr. = cross; Contrar. = Contraries; di. = direct; Incons. = Inconsistent; Int. or Integr. = Integration; Repugn. = Repugnance, Contradictories; Res. or Restr. = Restriction, Subalternation; un. = unilateral.—Blanks: in I. = Compossibles; in II. = No inference.—(Unilateral, bilateral, cross, direct, refer to the Extremes.)

The preceding Table may not be quite accurate in details.

here two universal prodesignations, the negative particle, like the ass of Buridanus, is left in equilibrio, and not necessarily attracted by preference, to either. (Illustrations might be drawn from *individuals* and *individualised classes*.) The denial is here, certainly, vague and ambiguous; but so it ought. For there are *five* several cases, any of which it may mean; and of these *any* will validly support the negation of the affirmative proposition. These are:—1°, “*Not-all* triangle is all trilateral,” equivalent to the proposition,—“*Some* triangle is all trilateral;” 2°, “*All* triangle is *not-all* trilateral,” equivalent to the proposition,—“*All* triangle is *some* trilateral;” these oppositions, overlooked by the logicians, I call *inconsistent*s. The following are *contraries*:—3°, “*All* triangle *is-not* (i. e. excludes) all trilateral,” tantamount (though ambiguously) to the proposition,—“*Any* triangle is not (no triangle is) any trilateral;” 4°, “*All* triangle is not all trilateral,” signifying,—“*Some* triangle is no trilateral;” 5°, “*All* triangle *is-not all* trilateral,” in the sense of,—“*No* triangle is *some* trilateral.” The first and fourth, the second and fifth, are in fact what I call *integrants*.

Now Mr De Morgan misconceives all this.—In the *first* place, he does not perceive that a proposition can be contradictorily denied, though the denial itself may rest ultimately only on a single contrary or inconsistent proposition. For though the denegand be only contrarily or inconsistently opposed to each of the alternatively supporting propositions, it is however contradictorily opposed to them *as a class*.—In the *second* place, he has overlooked all the five cases on which the denial may be established, except the last two.—In the *third* place, he marvellously supposes that each of these does not singly invalidate the *toto-total* affirmative, but that the truth of this can be only denied by a disjunctive proposition made up of a *toto-partial* and a *parti-total* negative; or, (for he varies,) of two *parti-total* negatives.—In the *fourth* place, Mr De Morgan, thus varying, does not observe, that his precept and his example are not at one.—Further, in the *fifth* place, he is here seen strangely to confound the hypothetical process of thought, prior to all negation, with the subsequent categorical negation itself; and still more strangely, to limit the common hypothetical preliminary to this form exclusively. Adhering to the present form, and to our previous example, the reasoner says to himself:—“The proposition,—‘*All* triangle is all trilateral,’ is false, if case 1, or 2, or 3, or 4, or 5, one or more, be true; but

case 4 alone, or cases 4 and 5 together, are true, therefore," &c. After this silent hypothetical preliminary, he categorically states his *contradictory* denial. The process is the same, where there is only one possible alternative, when, consequently, the proposition supporting the denial is *itself* directly and not disjunctively contradictory of the denegand. We think antecedently :—" If 'Aristotle is a philosopher,' be true, then 'Aristotle is not a philosopher,' must be false, and *vice versa*; but that is true; therefore this is false." We then openly state the negation.*—Mr De Morgan goes on to the second form.

2.—*Parti-partial Negation.* To this Mr De Morgan makes the following objection :—

"Thirdly, the proposition '*some Xs are not some Ys*,' has no fundamental proposition which denies it, and not even a compound of other propositions. It is then open to the above objection: and to others peculiar to itself. It is what I have called (F. L., p. 153) a *spurious* proposition, as long as *either* of its names applies to more than one instance. And the denial is as follows :—'*There is, but one X, and but one Y, and X is Y.*' Unless we know beforehand that there is but one soldier, and one animal, and that soldier the animal, we cannot deny that '*some soldiers are not some animals.*' Whenever we know enough of X and Y to bring forward '*some Xs are not some Ys*,' as what *could be conceived* to have been false, we know *more*, namely, '*No X is Y*,' which, when X and Y are singular, is true or false with '*some Xs are not some Ys*.'"

Hero also Mr De Morgan wholly misunderstands the nature and purport of the form which he professes to criticise. He calls it "*a spurious proposition.*" *Spurious* in law means a bad kind of *bastard*. This is, however, not only a legitimate, for it expresses one of the eight *necessary* relations of propositional terms, but, within its proper sphere, one of the most important

* In reference to this objection of Mr De Morgan, it has been acutely observed by the ingenious critic previously quoted, Mr Mansel :—"The true contradictory we take to be, 'all A is not all B,' which, like the original proposition, may be treated *collectively* or *distributively*, i. e. as a singular or as an universal proposition. In the latter case it is compatible with one of three distinct assertions, 'no A is B,' 'some A is not B,' 'some B is not A;' but the opponent does not commit himself to any one of the three. He denies only to the extent in which the original proposition was asserted, and no further; and hence, in proportion as the affirmation is *definite*, the negation will be *indefinite*." (North British Review, vol. xv., p. 116.) This, it will be observed, is in principle the same with what has just been alleged.

of the forms, which Logic comprehends, and which logicians have neglected. It may, indeed, and that easily, be illogically perverted. It may be misemployed to perform the function which other forms are peculiarly adapted more effectually to discharge; it may be twisted to sever part of one notion from part of another, the two total notions being already perhaps thought as distinct;—and then, certainly, *in this relation*, it may be considered useless:—but in no relation can it ever logically be denominated “*spurious*.” For why? Whatever is operative in thought, must be taken into account, and consequently be overtly expressible in logic; for logic must be, as to be it professes, an unexclusive reflex of thought, and not merely an arbitrary selection—a series of elegant extracts, out of the forms of thinking. Whether the form that it exhibits as legitimate be stronger or weaker, be more or less frequently applied;—that, as a material and contingent consideration, is beyond its purview.—But the form in question is, as said, not only legitimate—not “*spurious*,”—it is most important.

What then is the *function* which this form is *peculiarly*,—is indeed, *alone*, competent to perform?—A parti-partial negative is the proposition in which, and in which exclusively, we *declare a whole of any kind to be divisible*. *Some A is not some A*;—this is the judgment of divisibility and of division; * the negation of this judgment (and of its corresponding integrant) in the assertion that A has no *some*, no parts, is the judgment of indivisibility, of unity, of simplicity. This form is implicitly at work in all the sciences, and it has only failed in securing the attention of logicians as an abstract form, because, in actual use, it is too familiar to be notorious, lying, in fact, unexpressed and latenscent in every concrete application. Even in *Logic itself* it is indispensable. In that science it constitutes no less than the peculiar formula of the great principle of *Specification* (and *Individualisation*), that is the process by which a class (genus or species) is divided into its subject parts,—the counter process, to wit, of *Generification*. And this great logical formula is to be branded by logical writers as “*spurious*”! No doubt, the particularity, as a quantity easily understood, is very generally elided in expres-

* Looking to the table of Breadth and Depth (p. 699), and taking the highest genus, we say: “Some A is not some A; for some A is A E, whilst some A is A E”; and so on.—See also above, p. 165.

sion, though at work in thought; or it is denoted by a substitute. Meaning, we avoid saying,—“Some men are not some men.” This we change, perhaps, into “men are not men,” or “how different are men from men,” or “man from man,” or “these from those,” or “some from other,” &c. Still “some is not some” lies at the root; and when we oppose “other,” “some other,” &c. to “some,” it is evident, that “other” is itself only obtained as the *result* of the negation, which, in fact, it pleonastically embodies. For “other than” is only a synonyme for “is not;” “other (or some other) A” is convertible with “not some A”; whilst there is implied by “this,” “not that;” by “that,” “not this;” and by “the other,” “neither this nor that:” and so on. Here we must not confound, the logical with the rhetorical, the necessary in thought with the agreeable in expression.

Following Mr De Morgan in his selected example, and not even transcending his more peculiar science: in the *first* place, as the instance of *division* I borrow his logical illustration from the class “soldier.” Now in what manner is this generic notion divided into species? We say to ourselves:—“Some Soldier is not some Soldier; for some Soldier is (all) Infantry, some Soldier is (all) Cavalry, &c.; and (any) Infantry is not (any) Cavalry.” A parti-partial negative is the only form of judgment for division, of what kind soever be the whole; (and Mr De Morgan can state for it no other.)—Again, in the *second* place, as the example of *indivisibility*: “Some of this Point, is not some of this (same) Point.” Such a proposition, Mr De Morgan, as a mathematician, cannot admit, for a mathematical point is, *ex hypothesi*, without *some*,—without *some* and *some*,—without *parts*, same and other; it is indivisible. He says, indeed, that a parti-partial negative cannot be denied. But if he be unable to admit, he must be able to deny; and it would be a curious—a singular anomaly, if logic afforded no competent form for so ordinary a negation; if we could not logically deny, that *Socrates* is a *class*,—that an *individual* is a *universal*,—that the thought of an *indivisible unit* is the thought of a *divisible plurality*.

3.—*Quantities of Breadth and Depth*.*—I now proceed to con-

* This distinction, as limited to the doctrine of single notions, was signalized by the Port-Royal Logicians, under the names of *Extension* and *Comprehension*; Leibnitz and his followers preferred the more antithetic titles of *Extension* and *Intension*, though Intension be here somewhat deflected

sider Mr De Morgan's observations on these quantities, (pp. 29, sq.) constituting, as they do, the central doctrine of an adequate system of syllogism; but I regret to be again obliged to show, that he radically misunderstands what he attempts to illustrate. These, which are merely views of the same relation from opposite points, Mr De Morgan regards as things in themselves different. The reading of a proposition in depth, in contrast to its reading in breadth, "is," he says, "not another reading of the same proposition, but *another proposition, derived inferentially*, though not syllogistically, by aid of the dictum *de majore et minore*." He endeavours subsequently to prove, "that a *new distinction* is introduced; and, farther, that the *two modes of reading are not convertible*; the extensive mode gives the intensive, but not *vice versa* in all cases." This, after an elaborate detail, he calls: "*an important distinction*. In the affirmative, any portion of the intension of the predicate may be affirmed of the subject; *in the negative, it is not true that any portion of the intension of the predicate may be denied of the subject*. Thus, 'No planet moves in a circle,' gives us a right to deny any *constitutive* attribute of circular motion to that of a planet, but *not any attribute*; not, for instance, the progression through every longitude."

This suffices to show how completely Mr De Morgan mistakes the great principle:—*The predicate of the predicate is, with the predicate, affirmed or denied, of the subject*. In both cases, in negatives equally as in affirmatives, the rule is thoroughgoing. To say nothing of affirmation, touching which there is no dispute, —*All* that enters into the predicate notion is *denied* of the subject, if the predicate itself be denied. There is no exception. The rule is absolute; and, in reference to Breadth and Depth, there is no difference whatever between "constitutive" and "attributive," between necessary and contingent, between peculiar and common. It is of no consequence, what has antecedently

from its proper meaning—that of Degree; and the Quantitas *Ambitus* and Quantitas *Complexus* has, among sundry other synonymes, been employed—not exclusively, in modern times, for Aristotle uses τὸ περιζῆς and τὸ περιζήμερον.—The best expression, I think for the distinction, is *Breadth* (Πλάτος, *Latitudo*), and *Depth* (Βάθος, *Profunditas*). This nomenclature, which I have long employed, was borrowed from certain of the ancient Greek logicians; but as their works have been, for ages, rarely and perfunctorily looked into, this neglect may account for the oblivion in which the antiquity of these terms has remained, even after the distinction, which they best denominate, had obtained a renovated importance.

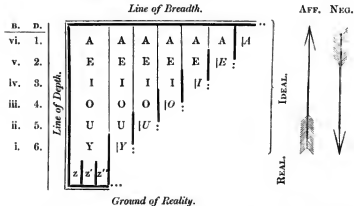
been *known*, what is newly *discovered*. These are merely material affections. We have only to consider what it is we formally *think*. In fact, if this principle be not universally right, if Mr Do Morgan be not altogether wrong, my extension of the doctrine of Breadth and Depth, in correlation, from notions to *propositions and syllogisms*, has been only an egregious blunder. I am, therefore, bound to do battle for it, as *pro aris et focis*; and, fortunately, its vindication is of the easiest.

"Newton is not Leibnitz." Here the individual, Leibnitz, is definitely, is contradictorily, denied of the individual, Newton. Nothing of Leibnitz is declared to be anything of Newton; and *vice versa*. Thus, every attribute comprehended in our thought of Leibnitz, be it his humanity, be it the wearing of his wig awry, is, in this proposition, virtually denied of Newton.—But, again, we say, "Leibnitz is a mathematician." Now, in so far as the notion of mathematician is in this proposition affirmed to be contained in the thought of Leibnitz, "mathematician" is mediately deniable of Newton. So much is certain. But do we herefrom infer,—is this tantamount to saying,—"Newton is not a mathematician," as a general negative, and in the sense of *no* or *not any* mathematician? Assuredly not. For this would be to deny of Newton *more* than is comprehended in the notion affirmatively predicated of Leibnitz. Let us consider what is meant by the proposition,—"*Leibnitz is a mathematician.*" "*A mathematician*" does not here imply *all, every*, or even *any* mathematician, but *some* mathematician,—*a certain* mathematician; and this *particulare*,—be it *vagum*, be it *signatum*,—this *some* or *certain mathematician* which we affirm of Leibnitz, we do deny of Newton, in denying him to be Leibnitz. To take Mr Do Morgan's own example: We do not universally deny of a planet *any* progression through every longitude, in saying, "No planet moves in a circle;" but we deny of it particularly *some* such progression,—to wit, *a circular*. More, indeed, we could not, from the proposition. For *all* circular progression through every longitude is only *some*,—is only a *certain kind of*, progression through, &c. *Progression*, &c., is the genus; *circular progression*, &c., is the species.—This, by the way, is an instance of the necessity in logic of a *toto-partial negative*, though, as shewn, such propositional form has been neglected or proscribed by logical authors.

(*Note*.—As others, besides Mr Do Morgan, have misunderstood this mat-

ter, I may subjoin the following Diagram; representing Breadth and Depth, with the relations of Affirmation and Negation to these quantities.

SCHEME OF THE TWO QUANTITIES.



In the preceding Table there are represented:—by A, A, &c., the highest genus or widest attribute; by Y, the lowest species or narrowest attribute; whilst the other four horizontal series of vowels typify the subaltern genera and species, or the intermediate attributes. The *vowels* are reserved exclusively for classes, or common qualities; whereas the *consonants* z, z', z'', (and which to render the contrast more obtrusive are not capitals,) represent individuals or singulars. Every higher class or more common attribute is supposed (in conformity with logical precision) to be dichotomised,—to be divided into two by a lower class or attribute, and its contradictory or negative. This contradictory, of which only the commencement appears, is marked by an italic vowel, preceded by a perpendicular line (|) signifying *not* or *non*, and analogous to the minus (—) of the mathematicians. This being understood, the Table at once exhibits the *real* identity and *rational* differences of Breadth and Depth, which, though denominated *quantities*, are, in reality, one and the same quantity, viewed in counter relations and from opposite ends. Nothing is the one, which is not, *pro tanto*, the other.

In *Breadth*: the supreme genus (A, A, &c.) is, as it appears, absolutely the greatest whole; an individual (z) absolutely the smallest part; whereas the intermediate classes are each of them a relative part or species, by reference to the class and classes above it; a relative whole or genus, by reference to the class or classes below it.—In *Depth*: the individual is absolutely the greatest whole, the highest genus is absolutely the smallest part; whilst every relatively lower class or species, is relatively a greater whole than the class, classes, or genera, above it.—The two quantities are thus, as the diagram represents, precisely the inverse of each other. The greater the Breadth, the less the Depth: the greater the Depth, the less the Breadth: and each, within itself, affording the correlative differences of whole and part.

each, therefore, in opposite respects, *contains* and *is contained*. But, for distinction's sake, it is here convenient to employ a difference, not altogether arbitrary, of expression. We should say :—"containing and contained *under*," for Breadth ;—"containing and contained *in*," for Depth. This distinction, which has been taken by some modern logicians, though unknown to many of them, was not observed by Aristotle. We find him (to say nothing of other ancient logicians,) using the expression *ἐν ὅλῳ εἶναι* or *ὑπάρχειν*, for either whole. Though different in the order of thought (*ratione*), the two quantities are identical in the nature of things (*re*). Each supposes the other ; and Breadth is not more to be distinguished from Depth, than the relations of the sides, from the relations of the angles, of a triangle. In effect it is precisely the same reasoning, whether we argue in Depth,—"*z'* is (*i. e.* as subject, contains *in* it the inherent attribute) some Y ; all Y is some U ; all U is some O ; all O is some I ; all I is some E ; all E is some A ;—therefore, *z'* is some A ;" or whether we argue in Breadth,—"*Some A* is (*i. e.* as class, contains *under* it the subject part) all E ; some E is all I ; some I is all O ; some O is all U ; some U is all Y ; some Y is *z'* ;—therefore, some A is *z'*." The two reasonings, internally identical, are externally the converse of each other ; the premise and term, which in Breadth is major, in Depth is minor.* In syllogisms also, where the contrast of the two quantities is abolished, there, with the difference of figure, the differences of major and minor premise and term fall likewise. In truth, however, common language in its enunciation of propositions is here perhaps more correct and philosophical than the technical language of logic itself. For as it is only an *equation*—only an *affirmation of identity*, or its *negation*, which is, in either quantity, proposed ; therefore the substantive verb, (*is, is not*), used in both cases, speaks more accurately, than the expressions, *contained, (or not contained) in* of the one, *contained, (or not contained) under* of the other. In fact, the *two quantities* and the *two quantifications* have by logicians been neglected *together*.

This Table (the principle of which becomes more palpably demonstrative, when the parts of the table are turned into the parts of a circular machine), exhibits all the mutual relations of the counter quantities.—1°, It represents the classes, as a series of resemblances thought as one, (by a repetition of the same letter in the same series,) but as really distinct (by separating lines). Thus, A is only A, not A, A, A, &c. ; some Animal is not some

* Though the theory of the syllogism in Depth (far less in both quantities conjunctly) was not generalised by Aristotle nor by any of the ancient logicians, it seems to have wrought unconsciously in determining the order of the premises. Our common order, that of Breadth, is derived from Boëthius ; and his influence was limited to the West—to the Latin schools. The Greeks, Arabians, Jews, &c., generally adhered to the order which, before Boëthius, was, with few exceptions, prevalent in the Latin world ;—the proposition which we call the minor premise standing first. The truth in this matter has been simply reversed by modern scholars and historians of philosophy. To quote only the most recent authority : Waitz, in his late valuable edition of the *Organon*, has, I see, followed the learned editors of Apuleius, in this universal error. Even the great John Albert Fabricius is at fault.

Animal; one class of Animals is not all, every, or any other; this Animal is not that; Socrates is not Plato; z is not z' . On the other hand, E is E A ; and Y is Y U O I E A ; every lower and higher letter in the series coalescing uninterruptedly into a series of reciprocal subjects and predicates, as shewn by the absence of all discriminating lines. Thus, Socrates (z'), is Athenian (Y), Greek (U), European (O), Man (I), Mammal (E), Animal (A). Of course the series must be in grammatical and logical harmony. We must not collate notions abstract and notions concrete.—2°, The Table shews the inverse correlation of the two quantities in respect of amount. For example: A (*i. e.* A , A , &c.) the highest genus is represented as having six times the Breadth of Y ; whilst Y (*i. e.* Y — A) the lowest species, has six times the Depth of A .—3°, The Table manifests all the classes, as in themselves unreal, subjective, ideal; for these are merely fictions or artifices of the mind, for the convenience of thinking. Universals only exist in nature, as they cease to be universal in thought; that is, as they are reduced from general and abstract attributes to individual and concrete qualities. A — Y are only truly objective as distributed through z , z' , z'' , &c.; and in that case they are not universals. As Boëthius expresses it:—"Omne quod est, eo quod est, singulare est."—4°, The opposition of class to class, through contradictory attributes, is distinguished by lines different from those marking the separation of one part of the same class from another. Thus, Animal, or Sentiently-organised, (A), is contrasted with Not-animal, or Not-sentiently-organised, ($\neg A$), by lines thicker than those which merely discriminate one animal (A), from another (A).—Thus:

Tonehing Propositions:—An affirmative proposition is merely an equation of the quantities of its Subject and Predicate, in Breadth or in Depth indifferently, and the consequent declaration of the coalescence, *pro tanto*, of the two terms themselves into a single notion; a negative proposition, on the contrary, is an enunciation of the non-equation of the quantities—of the non-identity of the terms. Every proposition may, in fact, be cast, be considered, at will, in either quantity, or in neither; therefore, if a competent notation we have, we must have one, which in every proposition is able to represent, at once, both the counter-quantities, and even to sublimate them into one.

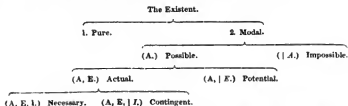
Tonehing Syllogisms:—A competent notation of syllogism, must, in like manner, avail consistently to exhibit all the syllogistic figures, as determined by the several relations of the two quantities to the middle term; and it must also be able of itself to manifest the differences of mood, abstracting from the positive differences of figure altogether. For of these differences, the modal is essential, the schematic is contingent.—Finally, if our system of notation be complete, we must possess not only one notation capable of representing, in different, though analogous, diagrams, syllogisms of every figure and of no figure; but another which shall, at once and in the same diagram, exhibit every syllogistic mood, *apart from all schematic differences*, be they positive, be they privative. All this my two schemes of notation, in conjunction, profess to do; and if I be not mistaken, all this they fully and simply accomplish.

In regard to the relation which the quantities of Depth and Breadth bear to the qualities of *Affirmation* and *Negation*, it is hardly necessary to say

more than has been stated above (p. 680). Affirmation follows the ascending order, that of superordination; Negation follows the descending order, that of subordination. This is shown by the arrows. In regard to the horizontal order, that of co-ordination: in the Affirmation of one co-ordinate, (individual or class,) the other, or others, are thereby denied; but from the Negation of one co-ordinate we cannot infer the Affirmation of any other,—unless the subject belong to the immediately higher class, and that class be dichotomised, by contradiction.

I stated above, (p. 148,) that the *Propositional Modes*, which from their generality had been introduced into Formal Logic, are merely Material,—themselves material predicates, (perhaps subjects,) or material affections of the predicate, (perhaps subject);—that these modes stand to each other in the relation of genus and species;—and that they may, therefore, be reduced to form and logical integrity. I may here briefly explain my doctrine on this point.

All *predication* is the predication of *existence*; and the predication of existence is either the predication of existence *simply, purely, absolutely*, or the predication of existence not simply, purely, absolutely, but under certain *limitations, manners, modes*,—*modal* predication. Now, these modes are, in themselves, affections of this or that particular matter, of which Logic, as a formal science, can take no account. Modal predication is thus, immediately and in itself, extra-logical. But if we can reduce these modes to those relations with which Logic is conversant; in that case Logic may mediately deal with them, as it deals with all other objects; that is, consider them, not as they really exist, in and for themselves, but as they come under the forms of the understanding—the forms of thought, as thought. Such relations are those of *containing* and *contained*, in the counter quantities of Depth and Breadth,—in a word, the relations of Genus, Species, Individual. That the modes which, without such reduction, have, to the utter confusion of the science, been intruded into Logic, may be so reduced, is, I think, possible; and the following scheme will show how I would realise the possibility. The whole difficulty of the problem lies in the vagueness and ambiguity of language; and we have only to fix the meaning of the words, to render obvious the logical dependency of the things.



1. The *Pure*, (τὸ τοῦ ὑπάρχοντος, τὸ ὑπάρχον, de inesse,) what *is simply* or unexclusively.
2. The *Modal*, (τὸ κατὰ τρόπον, τὸ τροπικόν, modale,—these expressions are not used by Aristotle,) what *is, not simply* or unexclusively, but in this or that way.

- (A.) The *Possible*, (τὸ δυνατόν, possible, &c.,) what *can be*, = the not impossible.
- (| A.) The *Impossible*, (τὸ ἀδύνατον, impossible, &c.,) what *cannot be*, = the not possible.—This and the preceding are congeners, contradictory of each other.
- (A, E.) The *Actual*, (τὸ ἐν ἐνέργειᾳ, τὸ ἐν ἐντελέχειᾳ, actuale, quod in actu, in esse, est, &c.,) what *is now*, = the not potential.
- (A, | E.) The *Potential*, (τὸ ἐν δυνάμει, potenziale, quod in posse, in potentia, est, &c.,) what *is not at this, but may be, at an other time*, = the not actual.—This and that immediately preceding are conspecies, and mutual contradictories. In a *logical* relation, these have been overlooked by Aristotle and the logicians; for the *ὑπάρχουσα πρότασις* of the Philosopher, is the *pure* or *non-modal* proposition, and altogether different from the predication of *actuality*.
- (A, E, I.) The *Necessary*, (τὸ ἀναγκασίον, necessarium, quod necesse est, &c.,) what *is (now), and needs must be*, = the not contingent.
- (A, E, | I.) The *Contingent*, (τὸ ἰσχυρίμενον, contingens, &c.,) what *is (now), but needs-not be*, = the not necessary.—This is a co-ordinate of the last previous, and they contradict each other.

Discounting, therefore, some ambiguities of a mere grammatical interest, (and on which, in these hints, I cannot even touch,) it is manifest that the Propositional Modes stand to each other in the formal relations of Subordination, Superordination, Co-ordination; and that, following the rules of genera and species, their predication falls under common logical government.

Logicians, in this affair, have been guilty of a *fivefold* aberration.—In the *first* place, they ought not to have defiled the purity of their formal science with a subject of merely *material* consideration—a subject to be by them discussed, only to be excluded or subordinated.—In the *second* place, they ought not to have dealt, as *logical*, with what was properly of *meta-physical*, or merely of *grammatical*, concernment.—In the *third* place, they ought not to have treated, as pertaining to the *copula*, what belongs to the collated *terms*.—In the *fourth* place, they ought not to have confused their doctrine by introducing as *foreign, special, complex, and difficult*, what admits of reduction to *logical* precept, *common, simple, and easy*.—In the *fifth* place, in their enumeration of these modes, they ought to have been exhaustive; they ought not to have omitted the *actual*, and its conspecies the *potential*.

I should notice, likewise, that logical authors have confused themselves and readers, in attempting to expound the mystery of modal inference. Yet nothing, when properly evolved, can be simpler or plainer.—Determine the mode of the propositions in question; and then their consecution, as modes, is simply the consecution of these modes, as genera and species, proceeding (usefully, at least)—in affirmation upwards and partially,—in negation downwards and totally. See the Tables, pp. 699, 702.

4.—Mr De Morgan (p. 27) asserts:—"Sir William Hamilton

acknowledges, that my own numerically definite system contains his system," &c.—To this I answer :

In the *first* place, "the system,"* which here and elsewhere Mr De Morgan fondly calls "his own," belongs to Lambert, by whom, if not first found, it was most scientifically and fully developed; in like manner, as the ingenious though inadequate canon of syllogism, propounded by Mr De Morgan, in his present memoir, (see p. 685,) is, in all respects, the exclusive property of Ploucquet. (Compare:—*Lambert's Organon*, (1764,) *Dianoilogie*, § 193, *Phænomenologie*, §§ 157, 187–190, 192, 193, 204–211, 220, &c.: *Ploucquet's Methodus demonstrandi Syllogismos, ope unius regulæ*, (1763,) pp. 2, sq.; his *Methodus calculandi in Logiceis*, (1763,) §§ 37, sq.; and (beside his *Fundamenta* and *Institutiones Philosophiæ Theoreticæ*,) his more matured work, the *Elementa Philosophiæ Contemplativæ*, (1778,) §§ 120, sq.) With the logical writings of both these mathematical philosophers, Mr De Morgan was acquainted. It would, indeed, have been little short of a miracle, had he, ignorant even of the common principles of Logic, been able, of himself, to rise to generalisations so lofty and so accurate, as are supposed in the peculiar doctrines of both the rival logicians, Lambert and Ploucquet,—how useless soever these may in practice prove to be.

In the *second* place, I never "acknowledged,"—I never dreamt of "acknowledging," that "the numerically definite system," (whoever were its author,) "contained," what may properly be called "my system." For such is not the case. I certainly, indeed, "acknowledged," when I became aware of the fact, that the minor doctrine of the *ultra-total quantification* of the middle term, had been anticipated by Lambert, though never designated by him, and neglected, not irrationally, by other logicians. This

* Mr De Morgan loves to talk paternally of logical "*Systems*;" and as every new error is to him the occasion of a new system, at least of a new nomenclature, no man has misconceived, misadopted, and misnamed so many. In his present contribution, (I can hardly claim acquaintance with his work on Formal Logic,) we have baptised, or rebaptised, or fathered by him, in Syllogistic alone:—1°, "The Cumular System;" 2°, "the Exemplar System;" 3°, "the System of Contraries;" 4°, "my own Numerically Definite System." All mistakes. This we have seen, indeed, of the two still-born, but not anonymous, monstrosities, which stand first; the third is only the old doctrine of Infinites, under a new and marvellous misnomer; whilst the fourth, so far from being a neglected foundling, to be dealt with as his own by the first charitable finder, is the legitimate, though puny, offspring of an illustrious parentage.

doctrine, which was generalised, (and first named) by me, independently of any predecessor,—which is, in fact, the only formal generalisation in the “definite” scheme at all, is not, however, peculiar to my views, more than any other logical truth.

5.—But, I must not forget:—Mr De Morgan (pp. 11–13) has displayed a scheme of Syllogistic Notation, which he propounds as the same, in principle, with mine—with the fragment to wit, given by Mr Thomson,—but as an improvement. (As for me, however, I discover no analogy, and willingly waive all claim to the invention.) The original he admits to be of the simplest and easiest, nor does he pretend, that, in any respect, it is either erroneous or inadequate. His own improvement, on the other hand, if complexity be perfection, must be pronounced a *chef d'œuvre*. It accomplishes (if it did accomplish) its purpose, through the employment of an apparatus of a fivefold multiplicity. A triad of ordinary letters,—a polygram of fourteen lines, of three various sorts,—eked out, and (it would be) interpreted by nearly a dozen arbitrary and unknown signs; all these are thrown together into a kind of heteroclit and heterogeneous circumvallation, the lines flanked, on one side, by something in the shape of a chevaux-de-frise, horrent with mysterious spiculæ,—into a kind of geometrico-algebraic medley, which Professor De Morgan calls “pictorial,” but which paints, describes, typifies nothing, even imaginable; and this hybrid and multifarious co-acervation of near thirty elements, partly ostensive, partly symbolical, is gravely proposed to represent a single syllogism in its simplicity,—a syllogism, too, intendedly categorical, but which turns out to be, in reality, disjunctive. In fact, among the numerous schemes (some twenty-eight I know,) of logical notation,—nay, even among his own,—none was ever yet so decom-pound, confusivo, perverse, not to say unintelligible, not to say erroneous. It concentrates every vice competent to such representation; it is at once contorted, operose and ineffectual. Comparing it with other schemes, Mr De Morgan asserts, this new complexus to be:—“*more convenient*,”—it is beyond human patience, if not simply impossible; “*more suggestive*,”—it suggests error, when not defying comprehension. We need hardly, therefore, be surprised, that, in the end, Mr De Morgan should actually laud the farrago for expressing *diametrically opposite* things (“the universality of the subject,” “the particularity of the predicate,”) by the *self same* representation. Apart, indeed, from

his general tendency to mistake, and his usual play at cross purposes with thought and language,* all Mr De Morgan's illustrations, whether ostensive or symbolic, of logical relations, conduce only to "darken counsel." Always arbitrary and ever complex, these are ultimately also various. Each new book,—new edition,—new paper is, in fact, a new construction; and every emendation of a former scheme is equally unfortunate with the primary failure. Mr De Morgan is a profound mathematician, and otherwise an able man. But philosophically, while strong at complication, his genius seems impotent either to simplify or to evolve. Out of mathematics, he can add but not subtract, multiply but not divide. Yet if wanting, as we must confess, in the art of making the difficult easy; no one, it should be proclaimed, is a more accomplished adept, in the counter craft of making the easy difficult.

6.—Before concluding: though unable to expose them in articulate detail, I must protest, in general, against various ignorances and absurdities, for which Mr De Morgan (unwittingly always) makes me to be responsible. Such are certain doctrines or examples laid to my account on pages 2, 12, 20, 21, 29, 30, 35, 36, &c.—But now to terminate:—

Apart from the exposition of scientific truths: I have been thus copious in refutation, not from any importance I attach to these critical objections in themselves, or with reference to myself; but mainly from the great respectability of the critic in his peculiar department, enabling me to signalise, by another memorable example, how compatible is mathematical talent with philosophical inaptitude, nay, how adverse even, are mathematical habits of thought, to sound logical thinking. Mr De Morgan has long held highest rank as a British mathematician. Latterly, wishing to be more, he has ventured to speculate on the theory of reasoning: and the "*Philosophical Society*" of the mathematical University of Cambridge, giving his memoirs upon logic an imprimatur, have deemed them worthy of publication in their *Transac-*

* Mr De Morgan professedly *identifies*—universal, affirmative, conclusive, possible, conjunctive, convertible, singular, &c., and particular, negative, inconclusive, impossible, disjunctive, inconvertible, plural, &c.; whilst, knowingly or unknowingly, he *reverses*—definite and indefinite, collective and distributive, contrary and contradictory, formal and material, &c. Heretofore, he even *confounded* terms and propositions, the middle and the conclusion of a syllogism. Mr De Morgan's "*System*" (of *Systems*) is "the Witches' cauldron."

tions. Now the present paper, to say nothing of the others, exhibits, from first to last, only the blind confidence (shall I call it, or confident blindness?) with which a mathematical author can treat a logical subject; breaking down, though never conscious of his falls, in every, even the most rudimentary movement:—Author, Memoir, and Society (curiously) concurring to manifest anew the real value of the Cambridge crotchet,—that “*Mathematics are a mean of forming logical habits, better than Logic itself.*” This crotchet is, however, a melancholy absurdity; for it is a crotchet which has confessedly turned that great seminary of education into “a slaughter-house of intellects,”—even of lives. It has been said of old,—“There is no royal road to Mathematics”; and we have again authority and demonstration, that Mathematics are not a road of any kind to Logic, whether to Logic speculative, or to Logic practical. A road to Logic, did I say? It is well, if Mathematics, from the inevitability of their process, and the consequent inertion, combined with rashness, which they induce, do not positively ruin the reasoning habits of their votary. Some knowledge of their object-matter and method is requisite to the philosopher; but their study should be followed out temperately and with due caution. A mathematician in contingent matter is like an owl in day-light. Here, the wren pecks at the bird of Pallas, without anxiety for beak or talon; and there, the feeblest reasoner feels no inferiority to the strongest calculator. It is true, no doubt, that a power of mathematical, and a power of philosophical—of general logic, *may*, sometimes, be combined; but the individual who unites both, reasons well out of necessary matter, from a still resisting vigour of intellect, and in spite, not in consequence, of his geometric or algebraic dexterity. He is naturally strong; nor a mere cypherer—a mere demonstrator: and this is the explanation, why Mr De Morgan, among other mathematicians, so often argues right. Still, had Mr De Morgan been less of a Mathematician, he might have been more of a Philosopher. And be it remembered, that mathematics and dram-drinking tell, especially, in the long run. For a season, I admit, Toby Philpot may be the Champion of England; and Warburton testifies,—“It is a thing notorious, that the *oldest mathematician* of England is the *worst reasoner* in it.”

So much for Mathematical Logic; so much for Cambridge Philosophy.

APPENDIX III. EDUCATIONAL.

(A.) ACADEMICAL PATRONAGE AND REGULATION, IN REFERENCE TO THE UNIVERSITY OF EDINBURGH.

THE following is an extract from the "General Report of the Commissioners appointed to inquire into the state of Municipal Corporations in Scotland, presented to both Houses of Parliament by command of his Majesty;" 1835. Coinciding, as I do, with the recommendations of this Report, in so far as they go, and, in the prevalent unacquaintance with the subject, they perhaps could not go farther; I may premise, that the experience of the sixteen [eighteen] years which has since elapsed, tends strongly to confirm, not only the expedience, but the urgent necessity of a reform in the Patronage and Regulation of the University of Edinburgh.

I add nothing to what has been said above (p. 362, sq.) as to the principles and mode of academical *patronage*, but a single observation:—that, whilst the removal of religious disabilities in the appointment to lay Professorships, may, in itself, be a measure both equitable and advantageous, yet, with a board of patrons like the Edinburgh Town-Council, nothing certainly could be anticipated more detrimental than its operation. In truth, so far from the chairs being thus thrown open to merit, apart from all sectarian considerations, sectarian considerations would prevail against merit, far more perniciously than heretofore. For, in that event, the various religious persuasions would strain every effort to secure an election to the Council of their correlative; among these councillors coalitions would be formed and agreements concluded; so that, in the end, the academical body would shew nothing better than a heterogeneous collection of obscure sectarian nominees. A repeal of the present tests would thus, either finish our civic patronage, or sink our University still lower.*

* (1853.) Since the above was printed, more than two years have elapsed; and the anticipation in the text has been unexpectedly verified

In regard to the *administration* of this University I would remark.—The legislative and executive functions (legally or in fact) are here exercised by two bodies—the Town-Council and the *Senatus Academicus*. But these two bodies are, severally or together, incapable of any due performance of these functions.—With honourable exceptions of individual members, the *Senatus Academicus*, as a body, is too numerous (32), and too ill chosen, too destitute of liberal erudition or of lofty views, and where not indifferent or hopeless, too generally beset with private interests counter to the scientific interests of the school and public,—to be able either rightly to legislate for the University, or (without intelligent controul) even rightly to administer its laws.—The Town-Council from its numbers (33), from its relative ignorance and incapacity, and from its exposure to all kinds of sinister influences, among which not the least dangerous is that of the party interests in the professorial body itself,—is not less incompetent to these functions, an incompetency of which, to its honour, it seems not altogether unconscious. The consequence of this is, that with the exception of occasional fits of spasmodic energy, from accidental stimuli, the professorial body is left virtually to make and to execute the academical laws. One result, of many, is shewn in the present state of the *Degrees*; which, if they certify attendance on certain classes, certify, assuredly, little or no proficiency in the graduate. To complain of such abuse, or to suggest any means for its correction, would, in the absence of an intelligent controuling body, be at present wholly idle. To those professors, therefore, who are dissatisfied with the conduct of the *Senatus Academicus*, and not content to co-operate in what they feel obliged to condemn; no other alternative is, in my opinion, left, than to retire from any participation in university proceedings. The Commissioners thus report: *—

by the most obtrusive experience. Sects, presuming that the religious test, itself an evil, would in this University under no circumstances be applied, —not even to obviate one far greater, have ventured openly to develop the nuisance of sectarian influence in academical appointments by the Town-Council; and accordingly, the sectarian majority of electors in that body have, especially in the last professorial election, voted by sect, and in manifest conformity with sectarian views. The Edinburgh academical patronage has at last reached its lowest point of subordination; religious parties now co-operate with secular corruptors in seducing the incompetent elector to violate his duties.

* On the vices of our civic patronage in Edinburgh, see also above, pp. 386-389.

"The opinion that the Edinburgh system of university patronage has worked well arises, we conceive, from the want of any tolerable standard or example in this country from which to form an estimate of the manner in which the duty of patrons of an university ought to be discharged.*

The Town-Council of Edinburgh, consisting of thirty-three members, is, in our opinion, *too large a body* to discharge, with advantage, the duties of patrons of literary and scientific offices. So great a number cannot possess that unity of purpose which would enable them to anticipate a canvass, and at once fix on the most eligible person to fill each vacancy. Such we consider to be the duty of university patrons, and we esteem the allowance of a canvass for an office in the university, however conducted, to be in itself an evil. In a body so numerous, divisions are apt to arise which cannot fail to obstruct the fair estimate of the merits of rival candidates. But, above all, the feeling of individual responsibility is destroyed, where a good appointment can reflect little honour, and a bad one is not felt to throw disgrace upon any one elector.

Under the former constitution of the Town-Council, a great majority of the members were usually merchants and tradesmen, but *little qualified*, by education, to be themselves very competent judges of the literary or scientific qualifications of others. From that cause also, as well as from their number, they were peculiarly *open to the influence of personal solicitation, and of local prejudice and prepossession*. Even under the present constitution of the Council, the qualifications which are likely to recommend individuals to the choice of their fellow-citizens as Town-Councillors are, in most cases, rather those which would fit them for taking an active part in the ordinary business of life than such as are calculated to render them suitable patrons of an university, and, indeed, their competency for the discharge of that particular duty will probably be little regarded. The *fluctuating nature* of the body is besides very unfavourable to the steady and consistent administration of this important trust; and the *political feelings* which are so apt to influence their own appointment are but too likely to affect the course of their conduct in matters which ought, of all others, to be exempted from their operation.

Notwithstanding the manifest defects and vices of the system, it must be admitted that many men of distinguished eminence have been placed in the chairs of this university, and that it has acquired, and hitherto preserved, a respectable character as a seminary of learning and science. This, however, must not be attributed to any excellence in the existing system of patronage and administration; but is partly owing to the state of medical education in the great universities of England, partly to the exclusion of Dissenters from those establishments, and, perhaps, above all, to the existence of a system of patronage and management still more objectionable in the other universities of Scotland. In the words of one of the gentlemen examined, (Mr Solicitor-General Cockburn,) :—"It is the greatest possible mistake, though 'a very common one, to suppose that the success of the university has been

* (1853.) The Report of the Burgh Commissioners was drawn up by the late Mr Thomas Thomson. To those who knew him, his name is a pledge for the caution, moderation, and accuracy of its statements.

owing to this mode of election. Its chief celebrity has been during the last century; and the rise of Scotland, for the hundred years that succeeded the Union, was so irresistible, not only in learning, but in every thing, that the greatest abuses might have existed, and did exist, and yet the country flourished. I have heard it stated, by the highest persons, and in the highest places, that the agricultural and commercial prosperity of Scotland was owing to the exclusion of the people from any share in the representation; and no doubt these two things, namely, their exclusion and their prosperity, did co-exist; so did the prosperity of the university and the election by the magistrates; but there was probably no system of election that could have been adopted, at that particular period of our history, under which many good professors would not have arisen in the metropolis. It is a much truer test of the excellence of any elective system to look to the number of ill-qualified persons who have been chosen, while well-qualified ones have been rejected. A single flagrant case of this description shows the true tendency of the system better than many right appointments. It would be indelicate to illustrate this view by examples; but I am confident that the facts would amply illustrate and condemn the scheme of placing such elections in any body constituted like the magistrates of Edinburgh. No one who has lived long here can have any difficulty in applying these observations.'

We have not thought it proper to take evidence with regard to particular cases of ill-bestowed patronage, as this could not be done without injuring the feelings of individuals, and the admitted and notorious circumstances connected with its administration have appeared to us fully to warrant the conclusions to which we have come.

The cases are very few in which the patrons have made offer of a vacant chair to any person, however eminent, who had not solicited their support. In no case that has come to our knowledge has the Town-Council elected a foreigner, or an Englishman; and the instances are comparatively few in which persons, not previously connected with Edinburgh, have been successful in obtaining professorships. Candidates, connected politically or personally with a *prevailing party*, have been preferred to others of superior qualifications, and good appointments have frequently been carried by narrow majorities. By the *junction of two parties* supporting inferior candidates, the best qualified person has been rejected. But the greatest evil of the system is the necessity to which candidates are subjected of trying to procure votes by *personal canvass*. Nor are the electors assailed only by the solicitation of the immediate competitors for the vacant office and their friends. When the election of a particular candidate for the existing vacancy would *throw open* a desirable office previously held by him, (as frequently happens in vacancies of medical professorships), the *influence of all the friends of the expectant, in the remotest degree, is brought to bear in their favour*. The electors are courted as if they were *gratuitously conferring a favour, not exercising a trust*. It is usually found expedient to procure the interference of those to whom they are under obligations; and it is impossible to disguise that other considerations are put forward than the merits of the competitors. In the words of a learned professor, whose declaration was taken, 'the candidates were compelled to stoop to the level of their electors, and there has

'not been a single instance in which, when a corrupt influence has been adequately exerted, the most superlative merit, if otherwise unaided, has had any chance, while it has often happened that, where merit did actually succeed, success was obtained by the very narrowest majorities, and only obtained at all by employing the same sinister means which would otherwise have been triumphant against it.' (Evidence of Sir W. Hamilton.) And another professor has observed, 'that the practices resorted to, on some occasions, to influence the members of Council, are such as must offend every man of feeling and principle.' (Evidence of Dr Christison.)*

* (1853.) I may here insert a further extract from the intelligent evidence of Dr Christison. After speaking of the irresponsibility of the members of the Town-Council from their numbers, fluctuation, ignorance, low rank in society, and also of the sinister designs of some, he thus goes on:—

"I proceed now to state what I have to say on the question, whether the Town-Council ought to retain the *patronage* of the University chairs. Some time ago, I thought that, however the [regulative] power might be lodged, the patronage might continue with the Town-Council. *My opinion has of late been materially altered, in consequence of the knowledge I have acquired of the manner in which competitions for vacant offices are carried on.* I have great doubts whether the *patronage* can be vested with safety any longer in the Town-Council, either as it is constituted at present, or is in future to be formed.

[1.]—"From the education and habits of its members, and their situation in life, they must, in judging of the qualification of candidates, be *dependent on the opinion of others*. There is *not one councilman in ten*, of the councils of late years, *qualified to act otherwise*, and I do not believe that the new councils will be in a materially different state—that the members will be men of general education, or possess such a knowledge of society, as to be *able, generally, to judge for themselves*. They must be *dependent on the opinion of others*, who have themselves *no responsibility*, and whose opinions may be *prejudiced*. I have said that the Town-Council is open to the admission of *medical men*, amongst whom there may be some who are not at all fitted, by character or station in their profession, to be unprejudiced judges of the qualification of candidates; and, above all, medical men may enter the Council for the purpose of establishing with the Council, as patrons, a *connexion which may be useful to them in a subsequent canvass*, and which, from what has happened in time past, will, I am sure, give them a *very undue and hazardous advantage* over other competitors.

[2.]—"Another objection which I would make to the Town-Council having the patronage of the chairs is, that they have been, and must continue to be, too much warped by *local connexions*. This is important, where the office to be filled up is one for which persons from a distance may become candidates. A candidate from a distance, unless of transcendent qualifications, has *no chance in the competition*, where he has to encounter the *local connexion* which may be formed with the Council by resident candidates. This is my own decided opinion, and I have reason to know that the same feeling *prevails generally*,—at least, in regard to the *medical chairs*.

[3.]—"Another, and the only other serious objection, which occurs to me,

The Town-Council of Edinburgh, as patrons of the university, has been found to have the right of regulating the rate of fees,—of prescribing the course of study required of candidates for degrees,—of creating, subdividing, and suppressing professorships,—and, generally, of directing the internal economy of the college. Its interference in these matters is complained of by the professors as injudicious and vexatious. We think there can be little difference of opinion as to the *injurious effects of the internal control thus exercised by the Town Council*; and, therefore, whether we be justified or not in concluding that the higher branch of patronage, which consists in supplying vacant professorships, ought no longer to be intrusted to the Town-Council of Edinburgh, we are clearly of opinion that there is no reason why they should continue to administer this part of the duty of patrons, which requires an intimate knowledge of the objects and necessities of the college, and of the progress and comparative advancement of science and literature in it and other academical institutions, and which is more liable than even the higher department to gross and frequent abuses.

The limits of our Commission have precluded us from making any inquiry or suggestion regarding that part of the patronage of the universities of Scotland which is vested in the *Crown*, or exercised by the *professors of each college*; and we are fully aware of the imperfection of any measure which would affect only a portion of the university patronage of Edinburgh, and should consider any scheme for the reformation of Scotch universities unsatisfactory that did not extend to them all.

Our inquiries have, however, impressed upon us the *urgent necessity of a change of system in the management of the university of Edinburgh*; and as the delay attendant on a more extended reformation renders expedient the adoption of a partial measure which may not be inconsistent with a general system, if any such should be hereafter adopted for regulating the patronage and management of all the universities in Scotland, we beg leave to recommend—

1. That a body of five Curators shall be constituted, in whom shall be vested the whole patronage and management of the university of Edinburgh, with all the powers at present exercised by the Town-Council in that matter.
2. That each curator shall hold his office for ten years from the date of his appointment, and shall then be re-eligible.

is, that the members of the Town-Council are of *such a station in society* that there has been introduced, what will, I fear, be continued in future, either under the present or new regime, a *disgusting system of canvassing*, which may prevent many persons from entering into a competition at all. I know well that the sentiments of many members of Council are undoubtedly formed on conscientious views alone. But the votes of others are obtained on grounds that have no connexion with the qualifications of the candidate; and the practices resorted to on some occasions, to influence the members of Council, are such as must offend every man of feeling and principle. It is unnecessary for me to dwell upon this subject. The system is notorious, but, however notorious it may be, the public are not aware of the extent to which it is carried."

3. That of these curators two shall be named by the Crown, two by the Town-Council of Edinburgh, and one by the Senatus Academicus.

4. That the curators shall not be members either of the Senatus Academicus or Town-Council, and that they shall receive no salary or emolument whatever.

In proposing these outlines of a plan for vesting the patronage and government of the university of Edinburgh in a board of curators, we are aware of the objections which may be urged against it. Probably no untried measure could be proposed, to which some objections would not be urged. We have had in view the system which has been found advantageous in the most distinguished foreign universities; * and we have endeavoured to adopt so much of it as seems to suit the institutions and peculiar views of this country. We have the less scruple in proposing so entire a change, that we do not think the present system of patronage susceptible of any effectual reformation; and we conceive that almost *any change*, which should place it in the hands of a *small and responsible body*, would be of advantage to the university.

It may be worthy of consideration, whether, on the supplying of each vacancy in the university, the curators should not be bound to lay before your Majesty's Government the reasons which have induced them to prefer the person appointed to the office. This has been suggested to us as a useful check on the exercise of their powers: and we are aware that, in the most successful foreign universities, the recommendation of the curators, supported by a statement of such reasons, is the foundation of the appointment, which flows directly from the Crown. We consider it doubtful, however, whether such a precaution is necessary or expedient, where the actual and responsible exercise of the duty of patrons is to remain with the curators." (P. 69, sq.)

The preceding recommendations are by a Royal Commission of Municipal Inquiry, appointed under a reforming administration; but nearly five years previously, that is in 1830, a Royal Commission of Visitation, nominated under a conservative cabinet, "to inquire into the state of the Universities and Colleges of Scotland," had completed its elaborate investigations, and made its general and its special Reports. The opinions of both Commissions are entitled to great respect; for the members of both were, in general, persons of high intelligence, and all of laudable intentions. The Commissioners of Visitation were not specially authorised to interfere with the academical *patronage*, as established; certainly, they

* (1853.) The reader will find a full account of the principles and experience of this system of academical patronage and superintendence, by a small body of enlightened and responsible curators, in a discussion expressly on the subject, in this volume. (See p. 362—400.) I am happy that this system, though its expediency be historically and theoretically notorious, has obtained the practical approbation of the Burgh Commissioners for its application among ourselves.

make no report in regard to the mode or modes of appointing Professors. But in matters where the two Commissions both report, under external differences an internal agreement will be found. Thus, they *concur* in declaring it inexpedient for the interests of education, for the sake of which alone Universities are instituted, to leave the power of legislation and ultimate controul in the hands of the academical teachers; and both, accordingly, recommend, that this function be intrusted to a *small extra-academical body*, "the Board of Curators" of the one, "the University Court" of the other. The recommendations by the Burgh Commissioners touching the Universities, are only incidental to the object of their investigations, and are therefore necessarily limited; whereas it was the primary and special object proposed to the Commissioners of Visitation, to inquire into, and report concerning, every matter of academical interest. I shall now, therefore, proceed to make a few extracts from the General Report, and the Report relative to the University of Edinburgh, by the latter Commission; and this on points which were beyond the consideration of the former.—And first of a *Degree in Arts*.

"It has appeared to us to be essentially necessary that the examinations for Degrees in Arts should be conducted, as at Oxford and Cambridge, by [sworn] Examiners appointed for the purpose, and not by the Professors.

When the Candidates are examined by the Professors, there is always the greatest risk that the Examinations will degenerate into a mere form. The qualifications of many will be known to the Professors. The Professors will naturally be disposed to be easily satisfied in regard to the qualifications of those who acquitted themselves to their satisfaction as Students; and even if more rigorously conducted, the Examinations will naturally be made to correspond to the proficiency acquired in the classes, and confined to the particular topics introduced in their respective Lectures. The character of the Professors will in fact be engaged in the success of the Candidate. Each will be examining his own pupils. His eminence as a teacher will be interested in the result; and the necessary bias of the mind will be to make the Degree the reward of the exertions and progress made in the class. Higher attainments will not be deemed necessary, and the Degree would thus soon become merely a reward for eminence in the classes, without requiring greater exertion, or encouraging greater acquisitions in knowledge. We apprehend that any approach to such a state of things would counteract the objects which we have in view, and that the Degree would be so indiscriminately conferred that it would never be an object of ambition, or be raised in public estimation. The experience which has already occurred as to the Scotch Universities demonstrates the truth of these remarks, and affords conclusive reasons for apprehending that the value of the Degree will not be raised if the Examination of Candidates shall be left in the hands of the Professors. The utter contempt in which the Degree of Master of Arts is

held in Scotland, and the notorious inefficiency of the Examinations under the existing system, have appeared to us to require that the examination of Candidates shall be conducted on a different footing. The evidence in regard to the mode of conferring Degrees in Arts in Edinburgh and Aberdeen, exhibits a striking illustration of the necessity of such a change as we now propose; and we do not think that any impartial observer can fail to acknowledge that the degradation in public opinion of the Degrees given by some of the Scotch Universities has been the result of the manner in which they have been hitherto bestowed. We have felt it to be our duty, therefore, to propose that Examiners shall be appointed for the purpose of ascertaining the qualifications of Candidates for Degrees in Arts." (Gen. Rep. 43.

What the Visitors say of a degree in Arts, and of the radical vice of the prevalent system of examination, has been only too fully confirmed by the experience of the twenty [twenty-two] years which have since elapsed. This degree, they state, was then "utterly contemptible," and it is utterly contemptible now. In the University of Edinburgh, after a temporary expectation of improvement, and a sufficient season of trial, the estimate of the "Honour" has again justly fallen to the lowest; for, affording no criterion of merit, and lavished upon any dunce who may obtain the favour of the individual judges, the "Laurel" is now again principally affected by a few humble intellects of the humblest acquirements, especially by those resident in England, where a degree in Arts is always of a certain reflected estimation. For an Oxford or even a Cambridge pass, though it certifies not much, certifies always something.

The system of examination for degrees in Arts, as realised in Edinburgh, violates every principle, and concentrates every defect. It is carried on, exclusively, by those who have other interests in passing or rejecting, than the competence or incompetence of the candidate; and every facility, every inducement is afforded, to the exercise of partiality. For,

1. The Professors are the only examiners.
2. The examination is strictly private, consisting altogether of written answers to questions communicated to the candidate at the time when his responses are required.
3. These questions are not previously known to, are not proposed by, the Faculty, but remain at the discretion of each individual examiner.
4. The answers also are limited to the one examiner, who does not communicate them to the Faculty.
5. The questions (for the minimum) are often, even ludicrously, beyond what ought to be demanded.
6. These are sometimes

relative to fortuitous subjects treated in the examiner's last course of lectures, and such as could only reasonably be proposed to the auditors of that course. 7. This variation affords an unfair advantage to certain individuals, and is otherwise no trial whatever of the general competence of candidates. 8. It is also looked upon as constraining extra attendance by candidates on such last courses. 9. In general, the candidate is not allowed to approve his qualifications by his own choice of books; nor are fixed books or classes of books proposed to him for study. 10. There is no law, there are no measures for preventing favour or disfavour; and any incapable may be passed, any respectable candidate may be rejected, at the mere will of a majority of any few members of the Faculty who may happen to be present at the decisive meeting. *And so undeserving, in fact, are some of those who have actually received the "Honour," that its refusal to any becomes thereafter an act of arbitrary injustice.*

All this evinces the necessity of a radical change in the mode of examination, if our degree in Arts should ever rise to value as a testimony even of the lowest proficiency. The plan proposed by the Visitors would certainly be a marvellous improvement. But I am doubtful (in the circumstances) as to the expediency of excluding the Professors from all share in the examination; though I have no doubt that the judgment of passing or rejecting and of classifying candidates, should be confided solely to a disinterested body, who ought likewise to be, at least, joint examiners with the Professors. Many, however, of the worst evils of the present system of graduation would be alleviated, were the candidates, even apart from the introduction of such a body:—1°, previously tried by an extra-academical board, as to their mere fitness to be taken on the academical examination; 2°, if this examination were made public, and consequently, in part at least, oral; 3°, if the subjects were fixed, and an adequate preparation in certain books or classes of books made sufficient to qualify for every honour; 4°, if candidates were allowed to give up for examination as many books as they could accurately master, and were classified in each department according to their proficiency; and 5°, if every professor, perhaps certain others, were not only declared entitled but invited to put questions orally in any branch; finally, 6°, if the judges were made to act under the obligation of an oath.—This plan would at least redeem the degree in Arts from its present merited contempt; it would make it a certificate

of some significance, rendering the examination also a stimulus to study, and an occasion for the manifestation of ability.

A *Degree in Arts* is a luxury, and its abuse is of comparatively little consequence either to the individual or to the public; a *Degree in Medicine* is a necessity, and its right regulation is of the highest importance, both to the worthy graduate's success, and to the general welfare. To this therefore I now go on.

The University of Edinburgh, in its *Medical* department, had been latterly in a gradual process of decline; and the question which the Visitors had first and principally to determine was,—Whether the Medical Doctorate was to be still farther eviscerated of all literary qualification, and yet the degree, issued under the same name, to be still entitled to its former privileges? Were this to be allowed, intending practitioners would be tempted by a more valuable license, at a rate as low as any Surgeons' or Apothecaries' company could afford. No doubt, the public would thus get mercy, under a higher name, an inferior order of practitioners, and be wholly deprived of its old accomplished Physician; while the inferior examining boards would be injured, the medical profession in general degraded, and the University at large discredited,—only, a portion of its members reaping, for a time, a personal advantage from the calamitous change.—But to be somewhat more particular.

Universities in general, and the University of Edinburgh in particular, were privileged by the State to grant, upon certain conditions, a certain kind of liberty to practise Medicine. They were privileged to examine, and to authorise candidates for the highest branch of the profession, that is as Physicians, but were not privileged to grant licenses for the lower departments, that is as Surgeons and Apothecaries. If, therefore, an University attempt this, it attempts what it has no right to perform; while, at the same time, by the attempt itself, it not only derogates from its own dignity, but commits an act of injustice upon other corporations, by usurping their peculiar privileges. But worse than this: The University of Edinburgh not only usurps what does not belong to it; it does not satisfactorily discharge the function of those bodies on whose province it encroaches. It is not merely superfluous. For, in the *first* place, it does *not* execute the duty of examination by those who have no interest in licensing incapables, but by those who have. In the *second* place, it dispenses with those branches of liberal education which it was *bound* to

insure that all its graduates possessed ; nay, it even dispenses with these, to an extent which would be held disgraceful by the inferior incorporations which it supersedes. For example : a smaller amount and an inferior quality of liberal learning is, in Scotland, required to qualify for the highest honours and privileges of the profession, than even in Ireland is deemed necessary for the very lowest ; so that the medical aspirant who finds himself, from want of Greek, unable to rise into a Dublin Apothecary, is obliged to subside into an Edinburgh Physician. (Ev. I. 218, 219.) In like manner, the classical acquirements of an Edinburgh Doctor of Medicine (which are wisely not taken upon trust,) would not enable him to pass before the Military, to say nothing of the Naval, Medical Board, (Ev. I. 458, 534, 535, 339) ; as these Boards, for either service, like the Prussian Government for all its lieges, justly place no confidence in academical certificates, but examine doctors and no-doctors, indifferently. Thus, from want of an academical controuling power, acting for the public and University, the public is, as said, deprived of that class of approved medical practitioners, to secure which exclusively, this and other Universities were relatively privileged ; whilst our Alma Mater, degraded by her members, selling, for their private interest, her highest medical honours, at a lower literary price than is exacted, not only by other academical bodies, but even by the inferior licensing incorporations, is, in fact, constrained by her own officers to convert her "Seminary of Science" into an "Asylum of Ignorance," covering the country with her annual issues of "graduated dunces,"—of "Doctores indocti." In thus reducing the standard of medical literary competency far below the academical level of England, Ireland, or any other country of Christendom, the supine or interested regulators of this school have, unfortunately, been allowed to accomplish the one natural result. Medicine has now ceased in Scotland to be a learned profession ; and though, even in Scotland, learned medical men may still be found, there is here no longer any assurance, not to say, of superior erudition, but any guarantee against the lowest ignorance, afforded to the public in a medical degree.*—All foretold by Dr Gregory, (p. 259.)

* (1853.) It may be proper here to make an articulate statement in regard to the dates of the deteriorations in the medical degree previous to the meeting of the Commission. Dr Gregory, in whose life the innovation durst not have been attempted, died in 1821 ; and, presto, in 1823 began the process of legislative descent from low to lowest. Previously, there was required for

Against the proceedings in this progress of abasement, the medical interest predominant in the Senatus, though peculiarly unqualified to legislate for a University, was not left without warning in the reclamations even of the Medical Professors. Dr Gregory was dead; but the late Nestor of the Faculty, Dr Duncan senior, foresaw nothing in the innovations, but "Edinburgh Degrees being conferred upon ignorant empirics." (Ev. I. 219.) Professor Sir George Ballingall thus declares:

"I cannot see the expediency or propriety of granting '*the highest degree in medicine*,' at such a limited expense of time and means, as will enable the holders of such degree to *undersell* or even to enter into competition with the common *routiniers* of the country. On the contrary, it appears to me that it is only by elevating the standard of scientific education in all its branches within the Universities, that we can hold out anything distinctive or desirable in a University education, or that we can expect to keep that vantage ground which these institutions have hitherto held in public esteem." (Ev. I. 268.)

Enlightened views in regard to the necessity of classical and philosophical accomplishment in the medical graduato were likewise held by other distinguished Medical Professors, as Dr John Thomson, Dr James Hamilton, and Mr James Russell,—to say nothing of *every* medical and surgical authority, out of the University. (Ev. I. 455, sq. 307, 308, 310, 312, 288.) But passing to

the Medical Doctorate, Literature, Greek, Latin, a Latin Dissertation, a capacity of speaking Latin, the age of twenty-one complete, and three years of medical study in this or any other University.—In 1823, Greek was given up.—In 1825, there was required, four years of medical study, with one at least in the University of Edinburgh, and a form of examination in Latin by members of the Medical Faculty. There was not required any knowledge of Greek, any capacity of speaking Latin, and nothing is said about literature or the age of twenty-one.

Subsequently to the Commission, academical attendance upon the subjects taught by *all* the many medical Professors has been made imperative, and *all* these Professors have been admitted as examiners for the degree; though each new chair, on its institution, had been regularly opposed by the holders of the older medical professorships, as superfluous. But the power of examining, is known, practically to act as a constraint of attendance upon the course of lectures of the examiner himself. I believe, however, that the "*Medical Faculty*," strictly so named, that is, the holders of the six oldest medical chairs, are still allowed to draw the fees of graduation,—fees which properly belong to the Library, and were only taken from it, on an extraordinary occasion, to remunerate the *non-professorial* examiners called in from the *College of Physicians*, when there existed only one or two medical professors in the University.

the opinion of other members of the Senatus, we find the Faculty of Arts in 1284 thus formally reporting :

" *No higher qualifications are expected from the Physician [who practises on an academical degree] than from the Surgeon [who does not]. Hence it has happened, that the Physician has sunk in the scale of general estimation, while the Surgeon has risen to his level. The Faculty can perceive no other plan more effectual, none more generally expected by the public, than by enlarging the qualifications of the Physician, by obliging him to obtain that literary and scientific education which will give grace and dignity to his medical acquirements, and which appears essentially necessary to every one obtaining the highest honours an University has to bestow.*"* (Ev. I. 144.)

What is thought, and justly thought, upon the subject by the public, and intelligent English public, appears from the plainly spoken evidence of an able and well-informed witness, whose name the Visitors do not communicate. It is well worthy of the reader's serious attention ; and the result is, that the Edinburgh medical degree was then regarded in England as nothing else (alas !) than a fraud upon the nation. And what, now ?

" It is argued,—that the demand for the highest rank in Medicine is limited, and that to many the possession of it is of no value. Granted. But is that a reason for increasing the supply ? Is that a reason for sending forth Doctors by hundreds every year ? Is it not unreasonable to argue,—that because the demand for medical men of the highest rank is limited, the University of Edinburgh ought, therefore, to have the privilege of conferring that rank, with a facility that multiplies the number beyond the demand, and degrades the distinction it is meant to convey ? One would suppose, from this line of argument, that Edinburgh College had been so chary of the honours it has to bestow, that, small as is the existing demand, it was not effectually supplied from Scotland. But the case is precisely the reverse. The complaints against the Scotch Universities are—that they supply a greater number of Doctors than the wants of society require—that they manufacture a baser article than Oxford and Cambridge, affix the same stamp to it, and introduce it in such quantities into the market, that the

* The Faculty, however, annulled all attention to the truth which they thus spoke, by requesting that a compulsory attendance on their own classes in a University should be the test of the literary competence " indispensable " in the medical graduate. They open their petition by saying :—" They feel it to be a duty they owe to the University and the public, not to allow the present occasion to pass without endeavouring to render the degree more respectable and more dignified than it has hitherto been ; and now that the Senatus, in their *boundless liberality*, have agreed to accept of certificates of attendance on self-constituted teachers, they will not, it is presumed, be *less indulgent* to the radical professors in Universities, who were originally constituted to lay the foundations of general knowledge, and to prepare the youth for all the learned and liberal professions," &c., &c. (Ev. I. 112.)

whole cargo is depreciated,—and when their coinage happens to be of sterling worth, that its value is lessened by the plated and Brummagem articles that have issued from the same mint. - - - To what extent the demand of higher qualifications for medical honours at Edinburgh College might affect the pecuniary interests of its Professors, I am not prepared to say; but I am sure it would raise the value of their Diplomas, and settle beyond a doubt the real merit of their School of Medicine. I am far from wishing to underrate the Edinburgh Professors; but I must be permitted to remark, that under their present system of conferring degrees, the number of students that flock to them for instruction, is no more a test of the value of their lectures, than the resort of young couples to Gretna Green is a proof of the piety of the Blacksmith who gives them his nuptial benediction. - - - But though some men go to Edinburgh in order to obtain a rank in their profession, which they could not otherwise acquire, and to which from the deficiencies of their education, and the mediocrity of their attainments, they have no right to pretend, the great majority of students go to learn their profession; and where they are well taught, there they will go, whether they expect to be decorated with degrees or not. If the Edinburgh Professors do their duty, and in comparison with other teachers are duly qualified to afford instruction, they may lose graduates, but they will not lose students by the change. - - - On the supposition that a higher and better educated class of medical practitioners is wanted, to a certain but to a limited extent, we are asked,—How is that class to be supplied? What sort of education is to be required from those who aspire to it? Ought there to be a different standard in Scotland from that which is used in England; ought, in short, the Scotch Professors to be suffered, at their discretion, to enrol natives of Lilliput and Brobdignag in the same regiment, and send them with certificates to London, testifying that they are of the same size, and qualified to serve in the same company?"—(Ev. I. 145.)

And Edinburgh complains that *her doctores* are not admitted among the *magistris* of the London College!—But we have been delayed too long from the opinion of the Visitors themselves.

"On the subject of the Preliminary Education which should be required of candidates for Degrees in Medicine, we have had much deliberation, and received a great deal of evidence. It has appeared to us to be a matter of great importance, that the persons who are to practise Medicine should be men of enlightened minds, accustomed to exercise their intellectual powers, and familiar with habits of accurate observation and cautious reflection; and that they should be possessed of such a degree of literary acquirement as may secure the respect of those with whom they are to associate in the exercise of their profession. We therefore thought it an indispensable qualification for a Medical Degree that the individual should have some reasonable acquaintance with the Greek and Latin languages, and with Mathematics and Philosophy; and though strong doubts have been expressed by many of the Medical Professors as to the expediency of rendering this an essential condition, from an apprehension that it might prevent many persons from taking the benefit of the instruction in Medical Science to be obtained in the Uni-

versities, we have found our opinion on this point confirmed by every one of the eminent Physicians and Surgeons, not belonging to the Universities, whom we examined, as well as by some of the Medical Professors themselves; while we have also been fully satisfied, by a due consideration of the matter itself, and of the evidence before us, that there is no solid ground for the apprehensions entertained." (Gen. Rep. 56.)

Those of the Medical Professors interested in the higher number and lower quality of degrees were, however, averse from such preliminary discipline; and the following is the comment by the Visitors on the attempted reasoning of these professors.—And first as to the *inutility*, maintained, of *liberal learning for a Physician* :—

"The amount of this would seem to be, that literature is a positive evil to a Physician; that it unfits him for the habits and state of mind which he ought to cultivate; and that it will be an obstacle to his success in practice. It is difficult to conceive that the learned Medical Faculty could have intended to go so far as this; but it is plain that there is much fallacy in the assertions, for it can scarcely be called reasoning, which they here adduce. It is unquestionably true, that if a man were to devote himself, in the manner stated, to Literature and Science, making these the chief, or almost the exclusive objects of his pursuit; he would not be a good Physician: but this is not at all what is intended; the sole object being, that a Physician should have that liberal education which is implied in a course of University attendance. By acquiring this, the mind would be invigorated for any intellectual pursuit, and it could superinduce no habit disqualifying for the activity of exertion, or for mingling in society as a medical man must do. Such education also, it is to be remembered, would be completed, or nearly so, before medical pursuits commenced, certainly long before practice was attempted, and would not therefore have the effect which is here supposed." (Rep. Ed. 187.)

Next, as to the effect, argued by the "Medical Faculty," that an elevation in the standard of *Doctoral competency* would be followed by a reduction in the *number of Doctors*. On this the Visitors remark :—

"It is thus represented, that because, which is undoubtedly true, there are men who practise with little or no literary attainment, the general tone of the profession should be lowered, or at least that no attempt should be made to elevate it, because the expense being thus increased, the number of enlightened Graduates would be diminished, and practice would be surrendered, much more than it is, to those of inferior qualifications. But this reasoning is far from being conclusive. There is, it is to be lamented, too great a disposition in many to prefer quackery to sound Medical Science; and by those who do so, the literature of medical men will not be held in much estimation. But as no one would contend, that on this account quackery should be preferred to knowledge, upon the same ground it would

seem that want of literature should not be preferred to learning. In fact, the preparatory education for which some contend, does not interfere in the slightest degree with the medical: it only tends to make the practitioner a more enlightened man." (Rep. Ed. 188.)

For myself, I am however inclined to think, that were the Degree in Medicine raised in Edinburgh to its ancient and legitimate literary eminence, (though the profession might then attract many whom it now revolts,) the number of Edinburgh graduates would be greatly decreased. But so it ought. The present proportion is, in truth, not honourable to the University, and useless, nay pernicious to the public. The effect, I repeat, is,—to deprive the nation of what a University was privileged to secure,—an ascertained class of liberally educated Physicians; for thus the highest degree is reduced to a level with the lowest license, the only difference being, that more has been paid for the higher name, and that the larger price has gone into different pockets. By the reduction of the physician to an unlearned practitioner, it is not Medicine only, as a liberal study, which has suffered; it is not only that the bodies of the lieges have been turned over to the murderous confidence of ignorant dogmatics (See above, p. 256, sq.) The learning of its medical profession is a foot in the tripod of a country's erudition; and this foot being broken, the whole tripod, that is the whole professional and liberal learning of a country, loses a principal support. (See above, p. 346, sq.)

The Visitors then proceed to adduce, in support of a liberal education in the medical graduate, the evidence of the three physicians, at the time, of the highest professional reputation in this city,—Dr John Thomson, Dr Abercrombie, and Dr Davidson. The first two are well known as authors; I therefore quote only the opinion of the last, whom all who knew, admired, not only for his rare medical skill, but for his great general talent and most varied acquirements.

"The first point I would remark on," says Dr Davidson, "is Preliminary Education. The first subject that attracted my attention, in reflecting upon the Education of Medical Graduates, was that of *Preliminary Instruction*, for which but *very slight* provision is made in the Statuta Solennia of this University, an acquaintance with Latin being only required; whilst the means, till lately, employed to ascertain the proficiency of the Students, even in that language, do not appear to be the best suited for the purpose. I cannot help thinking that more extensive literary and scientific education should be required from those who mean to take out a Medical Degree, as extensive as can reasonably be expected in young men of seventeen or eighteen, at which age the study of Medicine will probably commence. I conceive that the

branches of Preparatory Education should be Greek, Latin, French, and Mathematics; whilst Natural Philosophy, Logic, Moral Philosophy, and Natural History, may be acquired, either before beginning the study of Medicine, or may be attended to along with the Medical Classes. I presume that, though Natural Philosophy, Logic, and Ethics, will probably be studied, either at this or some other University, Languages, with Mathematics, may be acquired wherever such instruction can be procured; and that the proficiency of the Students in those branches of knowledge may be certified either by Diplomas, Certificates from respectable Schools or Academies, or by their undergoing an Examination by the Professors of this University. If I were asked the reasons for recommending a more extensive Preliminary Education for Medical Graduates, I should be puzzled, not from the difficulty of discovering them, but from the fear of that ridicule which attaches itself to advancing arguments in favour of an opinion which is so manifestly correct as to require no support. A preliminary Scientific and Literary education appears to be the best, if not the only proper preparation of the youthful mind for entering upon the study of so extensive and difficult a subject as Medicine, where an immediate demand is made for close attention, much discrimination, and an acquaintance with many subjects not strictly Medical. Experience has convinced me that those Students whose minds have been previously cultivated, make the most steady and rapid progress in their new pursuits, which are much less difficult to them than to those who are totally unscientific and deficiently educated. I know, besides, that it is a common subject of regret amongst most Physicians, as it is with myself, that they did not make use of youth, leisure, and opportunity, in laying a broad and deep foundation of general knowledge, on which to rest their Medical acquirements. I may be permitted to add, that were I not convinced of the necessity for a liberal education, preliminary to the study of Medicine, I should surrender my doubts to the authority of much wiser men, in England, Ireland, France, Germany, and Italy, by whose influence it has been established in the Medical Schools of those countries; nor should I be inclined to submit less willingly to the decision of the Faculty of Arts in this College, who strongly recommended a preparatory education for the Medical Graduates, in a Memorial presented, I believe, to the *Senatus Academicus* (which I had the advantage of perusing). A competent knowledge of Greek appears to be requisite for the Medical Students, from the fact that much of the language and terminology of Anatomy, Medicine, Botany, &c., is derived from that language, not only from the Greeks having been our earliest masters in many of the sciences, but also for the sake of convenience, from such terms being short, expressive, and explanatory, and ill supplied by the tedious circumlocutions of modern tongues. With these terms, of constant occurrence both in lectures and in books, the uneducated Student cannot fail to be puzzled; and he must either content himself with ignorance of their import, or bestow much time, and suffer no very agreeable fatigue, in hunting out their etymology. Independently of all these reasons, it appears me at least unseemly, that the members of a learned profession should be ignorant of the language in which those wrote who were their original instructors, and whose works are still, after the flight of ages, by no means unworthy of serious and attentive perusal. It seems, moreover, peculiarly unfitting that the Maguates

of the Medical Profession (those who have acquired either real or imaginary dignity from Degrees, to which some privileges belong,) should not possess the standard education of gentlemen, nor be able to take that station in society which a cultivated intellect is entitled to assume."—(Rep. Ed. 180, Ev. I. 503.)

The Visitors then go on to say :—

" There is much other evidence to the same effect ; but it is sufficient to point out the leading views upon the subject ; the particular grounds of opinion it would be impossible, within the limits of this Report, to detail. The conclusion to be deduced seems unquestionably to be *decidedly in favour of a superior Preliminary Education to that which is now required*. This can be obtained, apparently, without the slightest hardship : the more elementary parts of it being procured previously to the commencement of medical studies, and the more advanced during the prosecution of those studies ; an arrangement which it is in evidence could without difficulty be made. It would thus not be essential that there should be the Degree of Master of Arts, but merely that there should be an acquaintance with the learned languages and other branches of knowledge ; and by combining with the Medical Classes what can be acquired only at a University, the residence in Edinburgh would not be prolonged. The character of the Medical Profession would thus be much raised, and provision made, as has been already stated, for spreading throughout the country enlightened and well-informed men, who might be instrumental in increasing to a great degree the advantages to be derived from social intercourse, while they would have access to sources of enjoyment peculiarly valuable in the sequestered situation in which many Medical Practitioners must spend the great part of life."—(Rep. Ed. 189.)

To conclude this part of the subject :—

We have here *two* diametrically opposite opinions. On the one side, against the demand of a liberal accomplishment in the physician, we have six out of the seven holders of an academical monopoly, a body strongly and primarily interested in the creation of medical graduates, at the lowest qualification, and in the greatest number. *On the other side we have the authority of ALL Universities out of Scotland, and of the whole disinterested intelligence, in this and every other country, professional and non-professional, intra and extra-academical.* " The Medical Faculty "—(distinctively so called)—spoke, I doubt not, as it thought. But as the opinions of men in general, are, in general, only a reflex of their interests ; so it is difficult even for a mind, however vigorous and independent, to resist the magnetic influence, as it were, of the ordinary minds with which it acts in consort ; and thus is to be explained, the otherwise inexplicable fact, that men of high intelligence and the most upright intentions are

so often found engaged in the championship of measures, which, had they acted of and from themselves, they would intellectually and morally condemn. In fact, from individual members of the "Medical Faculty," and their personal accomplishments, might be drawn a signal manifestation of the fallacy of its conjunct Report. But this is needless. As Hobbes has well observed—Were it for the profit of a governing body, that the three angles of a triangle should not be equal to two right angles, the doctrine that they were, would, by that body, inevitably be denounced, as false and pernicious. The best, certainly the most curious, examples of this truth, are, indeed, to be found in the History of Medicine,—and of medicine, too, when yet a learned and philosophical profession. For this, on the one hand, is nothing else than a marvellous History of Variations: and, on the other, only a still more marvellous history of how every successive variation has, by medical bodies, been first furiously denounced, and then (though always laughed at by the wiser wits)—then bigotedly adopted. Homœopathy and the Water Cure are, now and here, blindly anathematised as heretical; in the next generation, it is not improbable, that these same doctrines may be no less blindly preached, as exclusively orthodox.—Such is poor human nature! Such is corporate, such is medical, authority!

The next point is the *Examination* for medical degrees. On this the Visitors thus report:—

"The Examination for Degrees in Medicine have hitherto been conducted by the Members of the Medical Faculty, exclusive of the Professors of the Medical Classes recently instituted by the Crown, and each Candidate has been required to pay a sum of Ten Guineas, which is divided equally among the Examining Professors.

"We are of opinion that this system is liable to very serious objections. The emoluments of the Professors who examine ought not to depend on the number of Candidates for Degrees. At present the fees drawn by the several Professors from this source are very considerable, in consequence of the great number of Candidates; and it appears from the evidence that the number of Degrees conferred has been continually increasing during many years, in a proportion much greater than corresponds at the rate of increase in the number of students attending the Medical School of Edinburgh.

"No explanation has been given of this extraordinary increase in the number of Degrees, and we are satisfied that it cannot be accounted for from any external causes. We are of opinion that the present system has a necessary tendency to render the Examinations *less strict* than they might otherwise be, and practically to *lower* the standard of qualifications in the estimation of the Faculty. It is, besides, scarcely to be doubted, that there must

be a natural reluctance in Professors to reject Candidates, to many of whom the fees paid to the Examiners may be a very serious sacrifice. Although most of the Professors in the Medical Faculty entertain opinionious adverse to any extension of the subjects of examination, and are strongly impressed with the idea that the importance and value of the University as a School of Medicine ought to be estimated by the *number of the Degrees* annually conferred, an entirely different opinion has been strongly expressed by *all* the other Physicians and Surgeons whom we have examined, being persons very extensively engaged in the practice of their profession. It should seem to us, that the value of the Degree must bear a proportion to the nature of the qualifications required for it; and we have already observed, that it does not appear to us, that either the reputation of the University as a School of Medicine, or the number of Students resorting to it for instruction, will be regulated merely by the number of those who may obtain Degrees. It has never been found, in regard to objects of such importance in professional pursuits, that the risk of failure has tended in any degree to diminish the number of those endeavouring to qualify themselves for attaining them."—(Gen. Rep. 64.)

What is here said by the Visitors is most true.

As to their *first* observation:—Nothing can be more inconsistent with every principle of academical policy than to make it the private interest of an examiner to be remiss or perverse in the performance of his public duty. But this is here done, and done, among others, in *three* ways. For, in the circumstances of the Edinburgh medical examinations: it is, 1°, made directly the interest of the examiner, to pass as many, to reject as few candidates, as possible; 2°, it is made indirectly his interest, to allow extra attendance on his class to compensate for deficiency in the examination;* and 3°, he is enabled to exercise with impunity, his favour or disfavour in the passing or rejection of any candidate.—Theoretically, this examination is thus utterly vicious; neither is theory here contradicted by experience.†

Nor is their *second* observation less correct. As to the large-

* It is well known, that the power of medical examination secures attendance on the class of the examiner, even though such attendance be not required for a Degree. Hence the anxiety to be admitted a medical examiner in this University, howbeit without a participation in the direct emoluments of the labour.

† The late Professor Leslie, in his evidence taken by the Visitors, and speaking of the medical department of the University of Edinburgh, says:—"It is too severe a trial on human nature to have one's duty set in direct opposition to his interests. No real reform in the curriculum can ever be effected but by the application of extrinsic and paramount authority."—(Ev. I. 155.)

ness of the relative number of Medical Degrees granted by the University of Edinburgh :—this, so far from being, in my opinion, matter of honour and satisfaction, should, in the circumstances, cause only humiliation and regret. For it exhibits nothing but decline ;—decline in the number of medical students,—decline in the requirements of examination,—decline in the qualification of the candidates. Comparing the *first* decade of the present half century with the *last* : *—we find the medical *students* in the for-

* (1853.) It is here seen, that the following significant contrast is the result of “ comparing the *first* decade of the present half century with the *last* :” and for the choice of these two periods, and of these two periods only, I had the strongest reasons ; the principal of which was, that, (besides being the most natural,) they were both wholly unexceptionable.—Now, (had we not previous experience of their boldness,) could it be believed possible, that finding it requisite to say something in defence of themselves, something in contradiction of me, certain members or partizans of our Medical Faculty have ventured to change, nay even to *reverse, the very fact*, on the foundation of which, and of which alone, my statements are professedly based.

In the “ Monthly Journal of Medical Science,” (July 1852, pp. 54–56,) conducted by four members of the Medical Faculty of the University of Edinburgh, this perversion is coolly committed ; and on the ground of this perversion, I am, first of all, accused of having *selected the second decade* of the century, to be able, with some show of reason, to “ denounce the academic honours of my own University as worthless, and to traduce the characters of my medical colleagues.” It is then articulately argued, that, for four several reasons, there occurred, about the middle of that *second* decennium, an extraordinary and temporary increase of medical graduates : of which the first and principal was “ the afflux of old students after the close of the war in 1815, who, unable to graduate at once for want of time, and the incessant demand for medical officers for the public services, afterwards arrived annually in great numbers to take their degree ; some without any additional study, others after a single year only of University attendance.”—Thus, on the supposition of making this *second* decade the ground of my statistics, I am then and therefore reproached,—for blunder, malevolence, and deception.

In answer to all this, I have simply to say,—that it was the *first* and *fifth* ten years exclusively, periods to which no objection has or can possibly be alleged, that I professedly took as the basis of comparison ; and that so far from employing the *second* decade, that decade is never even once alluded to. Cullen complains of medical facts, that they are even *false* than medical theories. And here is a *medical fact* with a vengeance.—But I am, it seems, also wrong “ to denounce the Academic honours of my own University as worthless.” I must always regret to “ denounce, as worthless,” the honours of any University, my “ *own*” or not ; but truth (umbrage or no umbrage,) is ever to be spoken ; and assuredly I do not treat the present Edinburgh Medical Degrees more contemptuously than they deserve,—and are shewn to deserve. How would Gregory have treated them !—As to “ traducing the

mer nearly *doubling* in number those in the latter; whereas the medical *graduates* are, in proportion to the students, nearly *thrice* as numerous, being, in the former, somewhat less than *one to fifteen*, in the latter, somewhat less than *one to five*. And this too, though in the former, only a *three* years medical study in *any* University was required; whilst in the latter, such a study during *four* years, and *one at least* in the *University of Edinburgh*, became necessary. Now what does this evince?—*Firstly*, That the University is trading on its former credit, a trade which if suffered to continue must end in a bankruptcy of that credit itself. For, *secondly*, its degrees are now granted to an inferior and more numerous order of students; which, *thirdly*, appears, because the proportional increase has taken place along with, and in consequence of, a diminution in the requirement of literary and liberal qualification in the examinee; whilst, *fourthly*, it is manifest, that students now resort to this medical school, chiefly for the sake of its facile and unlettered Doctorate, for, as four years of medical lectures in a university are here necessary for the degree, the whole number of medical pupils in attendance on this University is little more than four times the number of the graduates whom it annually turns out.*

characters of my medical colleagues," their defender is the *only traducer*. For he actually accuses me of stating what is false, (since to traduce is to calumniate); although he be unable to specify a single statement which is not punctually correct,—which it was not even my duty to signalize. My allegations are grave, indeed, but not calumnious; nor has the champion of the Medical Faculty left to its members a more consolatory reflection, than

"pudet hæc opprobria vobis,

Et dici potuisse, et non potuisse refelli."

—And as to "*colleagues*,"—see how these are made, now and here, p. 710, sq.

* (1853.) In fact, from what is stated in the "Monthly Journal of Medical Science," conducted, as already stated, by four of the Professors of the Edinburgh Medical Faculty, (*ibid*, p. 55,) it appears that *all* the medical students must now go up for a degree; consequently, in the circumstances, that a *degree* and its *easy attainment* are the only inducements which maintain a resort of inferior candidates to Edinburgh. I say *inferior* candidates; for, even with the present examination, it appears, that a larger proportion of these it is found impossible to pass, than was the case under the more onerous requirements of the older regulations. For, when the medical students were double in number, only a fifteenth part thought of going up for a degree, and again of these "*one in fifteen*" (says the organ of the Medical Professors,) was rejected; whereas now, when the students have fallen to a half of their former number, *all* go up for a degree, and of that all, no less than "*one in five*" (says the same organ,) is found unqualified, even on the present degraded standard, to obtain it.

It thus appears that the students in medicine are attracted to Edinburgh chiefly by the bribe of its degree; and that at least the English candidates are almost exclusively those who are either too illiterate to satisfy the liberal requirements even of the London University, (for Oxford and Cambridge are here out of question), or professionally too incompetent to stand the test of the impartial examination there organised. When the literary qualifications for our Scottish medical degrees are raised to a level even with the lowest standard of other British Universities, (not to say of our Surgical Colleges and Pharmaceutical Halls,) and when our Scottish academical examinations are rendered unbiassed criteria of professional competency; then will the number of our medical graduates afford an index of the relative eminence of our medical school; *but not till then*. Should matters go on as hitherto; if, now there be no certainty, so, soon there will be no probability, that even the "small Latin and no Greek," still nominally required, will be furnished by the medical candidate and exacted by the medical examiner. "'Tis Latin, and cannot be read;" this which the late Dr Gregory predicted would soon be the rule in his profession, is certainly no longer the exception: nay, even English grammar and spelling are, by the confession of Edinburgh Medical Professors, luxuries, but not necessities, for those whom our University proclaims to the world, as meriting and having received her "Highest Honours in Medicine." Latin is now, as Greek was before 1823;—it is nominally required for an Edinburgh medical degree, and an examination as to sufficiency is left to the *Medical Faculty*. But in 1826, scarcely three years after Greek was dropt from the Edinburgh requirements for a physician, we have the highest authority in that Faculty declaring, "that not one medical man in five hundred reads Greek." And yet only three short years before, the Medical Faculty was professedly reading and examining in Greek, nay certifying to the sufficiency of all its graduates, in the language of Hippocrates,—the language now authoritatively declared (what was long known in fact,) to be professionally obsolete. Such, however, is a specimen of free professorial examination. Again: in 1825, the necessity of speaking and of understanding spoken Latin was formally taken off both Professor and Student; a candidate's Latinity was left hereafter to be tried by the same examiners as was, horetofore, his knowledge of Greek; and now, after the operation not of throe but of nearly thirty years,—

now, after reducing the examination from the level of a *third*, to a level of *all* the students, how many are there,—in five hundred medical graduates of Edinburgh, let us say,—who read Latin? In fact, though not without advantages, in certain respects, this measure has left us no security, that either medical graduate or medical professor, should henceforward be able to make any use of the language of the learned,—the language in which nineteen in the score of medical notabilities have been written. And from the illiterate and nameless multitude of this fallen and falling profession, the courted, canvassed, cajoled, concussed electors—the incompetent crowd, (not certainly without its competent individuals also,) to whom has been abandoned the patronage of this University, are still left (apart from occasional notoriety of merit,) to nominate, by chance, favour, or intrigue, among others, its medical professors; and these medical professors, now constituting the predominant influence in the *Senatus Academicus*, take upon them, and are quietly allowed, to administer, according to their lights, the affairs of this intended school of learning, and to lavish for their personal interest, and not for the common good, *trusts* fondly confided to the *Senatus*, when the *Senatus* was still, comparatively, a learned, intelligent, and well-balanced body. Indeed, if the law do not avert the evil, the Reid Trust, instead of a resource towards the great ends of the University,—of the teachers not more than one of the taught,—seems destined to be degraded into a fund for reckless litigation, into a fund for the private profit of the trustees, and medical trustees, in particular.* (See p. 400.)

* (1853.) "The Monthly Journal of Medical Science," conducted, as said, by four Professors of the Edinburgh Medical Faculty, curiously consummates its systematic reversals of fact, by saying, in reference to a protest of mine, against the proceedings touching the Reid Fund, that "the Medical Faculty were roused to resistance, and compelled me to retract."—(Ibid. p. 59.) Now this statement is not only unfounded, there is nothing even by which the mistake can be explained. No retraction by me in the matter was ever made, or ever thought of; because I had advanced nothing which it behoved me even to correct. On the contrary, so far from retracting,—my protest, on finally retiring from the Trust, was, by the votes of the Medical Professors, unable to answer its statements, *illegally* excluded from the Minutes, at the time; and when, subsequently, I again formally required its insertion, this requirement was by their votes again refused,—but now on a ground, idle in itself, and not correct in point of fact. If not inserted, on a third application, the document shall be printed, &c.

The history of Universities—in truth, of all human institutions, lay or clerical, proves, by a melancholy experience, that seminaries founded for the common weal, in the furtherance of sound knowledge, are, if left to themselves,—if left without an external and vigilant, an intelligent and disinterested supervision, regularly deflected from the great end for which they were created, and perverted to the private advantages of those through whom that end, it was confidently hoped, would be best accomplished. And this melancholy experience is, though in different forms, almost equally afforded in all our older British Universities; for all of these the State has founded and privileged, but over none has it ever organized any adequate controlling power. And what is the consequence? What is their condition? What ought they to be, and what are they? Corrupt all;—all clamant for reform. But unless the reform come from without, we need not, in any University, have any expectation of a reform coming from within. Left to itself, there is no redemption;

“*Ipsa sui merces erit, et sine vindice præda.*”

Our only hope, a hope, indeed, long deferred, is a reform from without,—from above,—from the Supreme Civil Power. In regard to Edinburgh, it would be peculiarly simple to expect a correction of the evils prevalent in that University, from the bodies—either that in which the corruption has originated, or that by which it has been tolerated, or rather,—we should say in charity,—not observed. It would, indeed, be positively foolish to call to the *Senatus Academicus*,—the *Senatus* as now constituted,—“*Arise! awake!*” It would be more rational to invoke even the Town-Council; but if the State do not interfere, then this University must, with others, abide the alternative—“*be for ever fallen!*” Surely, however, the State cannot always issue costly Commissions, and yet, never afterwards heed their recommendations. In the cases of Oxford and Cambridge, reform may indeed be difficult; but in the case of Edinburgh, nothing could be more easy. In fact, the most essential improvements are in general manifest, and even urged in the Reports of the two Commissions; and these, we may now confidently hope, will not long remain neglected, seeing that Government seems seriously engaged on an inquiry into the English Universities.

But I have dwelt too long upon this subject, and shall only add:—that the experience of Edinburgh, like the experience of

every other University in which the same practice has been pursued, proves, that an examination by professors exclusively,—by all the professors of a faculty*—and by professors left to their own discretion, and without even the obligation of oath, statute or publicity, is utterly worthless, as a criterion of competency in the candidate for an academical degree. Without entering on details, I would only say in general, that to redeem the Edinburgh medical degree, even to respectability, there are required the three following conditions :

1°. An extra-professorial examination, to ascertain whether the candidate possesses the general literary and scientific knowledge necessary for any liberal profession.

2°. An examination, either wholly extra-professorial, or, at least, with extra-professorial judges (who should also be examiners), to ascertain the professional qualifications of the candidate.

3°. The examiners and judges :—to be adequate to their functions ; to act by rule ; publicly, as far as possible ; and, now as formerly, here as elsewhere, under the obligation of a solemn oath.

These are the requisites of mere respectability ; but were the candidates impartially and ably classified on a sufficient standard, the examination might be raised to a higher value.

The recommendation now made to introduce other examiners for a degree beside the academical lecturers, is no anomaly, is no innovation. It is, in fact, a return to principle—to the custom of

* When limited to a few, responsibility is concentrated ; but when (as now in Edinburgh,) the right of examination, and consequently the benefit of an indirect compulsion on attendance, is conceded to all the members of this Faculty, all become interested in certain measures, responsibility is attenuated to a minimum, and the whole body does, what a part of it would not be bold enough to attempt. Since the previous sheet was printed, above four months ago, I see that the medical examiners have been publicly accused of rejecting a candidate, not for incompetence, but on the confessed ground that he was supposed favourable to a medical theory, rising dangerously in opinion, and not in unison with the medical theory of his examiners. On such a step,—such an injustice,—such an absurdity, the old sectional examiners would not have ventured. If the charge be well founded, an Edinburgh medical graduate may now be an ignorant, unable to spell his mother tongue, but must not be a proficient, professing to think for himself. So certain also are now the opinions of a majority touching the very practice, and in the very body, where, heretofore, medical scepticism was always in proportion to medical wisdom ! Our Gregorys and Thomson—what would they now say to this ? See pp. 256—259, note.

all academical antiquity, a return oven to the practice of the University of Edinburgh itself, to wit, in its first bestowal of medical degrees. Then, the Doctors of the Edinburgh College of Physicians were called in; indeed, the graduation fee which has since been left to the "Medical Faculty" of the University, belonged to the Library, and was thence taken, to bestow it on these extra-academical examiners, in compensation of their non-official trouble.—I may add, that had the Town-Council, in their recent regulation touching the medical degrees of this University, limited the qualifying attendance to the courses given by medical *graduates*, and more especially by Edinburgh medical graduates, there could not possibly have been any valid doubt with regard to the legal competency of such regulation, which would, in fact, have been only a step towards a state of true academical legality.

APPENDIX III. EDUCATIONAL.

(B.) THE EXAMINATION AND HONOURS FOR A DEGREE IN ARTS, DURING CENTURIES ESTABLISHED IN THE UNIVERSITY OF LOUVAIN.

I HAVE previously referred (p. 422) to this Appendix, for a statement in regard to the examination for degrees by the University of Louvain, in its Faculty of Arts; which, though overlooked by all academical historians, is, I think, the best example upon record of the true mode of such examination, and, until recent times, in fact, the only example in the history of Universities worthy of consideration at all. And as I shall have occasion to make a reference to this examination, from the Appendix upon Oxford, it may be convenient to insert here, what I should otherwise have postponed.

The University of Louvain, long second only to that of Paris in the number of its students and the celebrity of its teachers, and more comprehensive even than Paris in the subjects taught; was for several centuries famed, especially, for the validity of its certificates of competency—for the value of its different degrees. It is recorded by Erasmus as a current saying, "that no one can graduate in Louvain without *knowledge, manners, and age*." But among its different degrees, a Louvain promotion in Arts was decidedly pre-eminent; because, in this Faculty, the principles of academical examination were most fully and purely carried out. I am acquainted, I think, with all the principal documents touching this illustrious school; and beside the *Privilegia*, or collection of statutes, &c. (1728,) possess the relative historical works of Lipsius (1605,) of Grammaye (1607,) of Vernulæus (1627 and 1667,) of Golnitz (1631,) of Valerius Andreas (1636 and 1650,) of the Zedlerian Lexicon (1738,) and of Reiffenberg (1829, sq.) But strange to say, I have found no articulate account of its famous examinations, except in the *Academia Lovaniensis* of Vernulæus; and from that book, with a short preliminary extract from the *Fusti* of Andreas, I translate the following passages.

VALENIUS ANDREAS.—“PHILOSOPHY, from the very commencement of the University, was wont to be taught, partly in private houses, partly in ‘the Street’ or public *School of Arts*, (where, indeed, the prelections of two chairs in that Faculty, to wit, *Ethics* and *Rhetoric*, are even now publicly delivered,) the Masters themselves teaching each his peculiar subject at a fixed and separate hour; until, in the year 1446, by the authority of the Faculty, [private tuition was abolished, and] four Houses were appropriated to licensed instruction in Philosophy, [some eight and twenty other Colleges belonging to it, being left to supply board and lodging to the students.] These four Houses are commonly called *Pædagogia*, and, from their several insignia, go by the names of the *Lily*, the *Falcon*, the *Castle*, the *Hog*—The *LANGUAGES* (Hebrew, Greek, and Latin,) thereafter obtained their special Professors in the *Trilingual* or *Bustidian College*—The chair of *MATHEMATICS*, (though its subject had been previously taught,) was founded in the year 1636.”—(Pp. 9, 243, 249.)

VERNULÆUS, L. ii. c. 6. “ON STUDY AND DEGREES IN THE [LOUVAIN] FACULTY OF ARTS.

- - - “Let us now speak concerning Study, which in this Faculty is twofold.

“The study of Philosophy is accomplished in two years. For there is given nine months to *Logic*, eight to *Physica*, four to *Metaphysics*; whilst the three last months are devoted to *Repetitions* of the whole course of Philosophy.—[‘Account is also taken of *Moral Philosophy*, taught on Sundays and Holidays, by the public Professor, in ‘the Street’ or School of Arts, and in the *Pædagogia* by domestic Professors.’—(V. Andreas, p. 242.)]

“The exercises of this philosophical study take place in four Gymnasias, called *Pædagogia*. In each of these there are four daily prelections, two before, two after, noon; - - - and each House has four *Professors* of Philosophy, two of whom are called *Primaries*, two *Secondaries*. These Professors divide among them the whole course of Philosophy. And first, in *Logic*: The *Primaries* expound the Introduction of Porphyry, Aristotle’s Categories, and his books of Prior and Posterior Analytics: whilst the *Secondaries*, after an explanation of the Elements of Logic, lecture upon Aristotle’s books of Enouncement, Topics, and Sophisms. In *Physica* and *Metaphysics*,* [I omit the enumeration of books,]

* Compare Valerius Andreas, pp. 242, 243.

the Primaries teach at the hours of six and ten of the morning; the Secondaries at two and four of the afternoon; and the hearers for one hour take down the dictates * of their instructor, whilst for another they are examined and required to give an account of the prelection which they have again, in the interval, considered.

“ The exercises of *Disputation* are either private or public.

“ The *private* are conducted in the several *Pædagogia*, and in kind are twofold.—In the first place, the students, at certain fixed hours, contend with each other, on proposed questions, note each other's errors, and submit them to the judgment of the Professor; and he, thereafter, assigns place and rank to the more learned.—Besides these, on each Monday and Friday, there are *Disputations* held on points of *Logic* and *Physics*, over which one of the Professors in rotation presides. These commence in January and end in June.

“ The *public* *Disputations* take place in the common School of Arts, which is called ‘The Street;’ and these also are of two kinds.—In the first place, on Mondays and Fridays, during Lent, the Physical auditors of all the *Gymnasia*, divided into certain classes, compete among themselves for glory; one prescribing to another the matter of disputation.—Besides these, there are eight other *Disputations*, carried through on Sundays, and which commence in January. There are present all the Physical hearers with their Professors, and in these they severally make answer during an hour on certain predetermined theses; and are opposed by the *Prior Bachelor*, (that is, by him who has been chosen from the more learned,) and thereafter by others.

“ The Honours or Degrees which are obtained in this Faculty are those of *Bachelor*, *Licentiate*, *Master*. Previous to these there is one public act, that of *Determination*, as it is called. Therein the students of *Logic*, in a public meeting of the whole University, severally state their opinion on some Ethical question proposed by the Preses, who is one of the Professors. In this manner they profess themselves Students of Philosophy, but obtain no Degree.

“ The *Baccalaureate* is here twofold. The one is obtained on

* The Faculty had not a *printed cursus* on these departments, as on *Logic*. The Commentaries by the Masters of Louvain on the books of the *Organon*, are among the best extant. But the objects of study in all the *Pædagogia* were uniform; and all the pupils could be equally examined, &c., against each other in the general concourse of the University.

examination after a three months' study of Physics; the other, after the completion of the course of Metaphysics, and a public responson touching Philosophy in general.

" For the *Licence*, the candidates of all the Gymnasias are presented in a body to the Venerable Faculty of Arts; and on that occasion, and in their presence, their future *Examiners* (that is the [eight] *Primary Professors* of all the Gymnasias, nominated by the Gymnasiarchs,) make *solemn oath* that they will be influenced by no private favour, but rank each candidate in the strict order of merit.—The examination then begins. This is twofold; the one is called the *Trial*, the other the *Examination* [proper.] For each, the whole body of candidates is divided into *three Classes*. The *First Class* consists of twelve, to wit, three from each of the gymnasias, students namely, who by the judgment of the Professors stand highest in learning. The *Second Class*, in like manner, comprehends twelve, the three, to wit, who from the four gymnasias are named as nearest in proficiency to the first. To them [of the second class] are added twelve others, called *Aspirants*. The *Third Class* is composed of all the rest. Those who are of the First Class are [each] examined for about three hours on all the branches of Philosophy; those who are of the Second, for two hours; those who are of the Third, for half an hour; and this, both in what is called the *Trial*, and in the *Examination* proper. The several examiners write down the answers of all the candidates, read them over again at home, and determine [what in their several opinions should be] the order of all and each, and write out the list. The *Examination* finished, the examiners, on a day appointed, consign their lists of arrangement to the Dean, who delivers them to the Gymnasiarchs. They consult among themselves, and, by an ingenious device, calculate the suffrages of arrangement, and appoint to each candidate his true and unquestionable rank.

" When, however, the *First* or highest (*Primus*) is proclaimed, the bell is tolled in his gymnasium, for three days and nights, and holiday celebrated. I pass over the other signs of public rejoicing. This honour is valued at the highest, and he who obtains it is an object of universal observation. On the third day thereafter, in the public School of Arts, the candidates are, in this fashion, proclaimed *Licentiates* :—In the first place, the Dean of the Venerable Faculty, after a public oration, presents the candidates to the Chancellor, [who on this occasion ranks superior to the Rector].

He (the Chancellor) then, having propounded a question, orders the Primus to afford, in the answer, a specimen of his erudition, he himself acting as opponent. The names of all the others are then proclaimed by the Beadle, in the order established by the Gymnasiarchs, on the votes of the examining Professors."

L. ii. c. 8. ON THE CELEBRITY OF THE [LOUVAIN] FACULTY OF ARTS. " - - - Nearly two hundred candidates annually merit the Laurel of Arts; *what other University confers so many? The emulation prevalent between all the [Houses,] Masters, and Students of this Faculty*, and which though intense is void of envy, for in study discord is concordant;—this emulation *braces both the diligence of the teachers, and the application of the taught*. And while they who stand first in the classification, merit and receive especial honour, while they who stand last, are almost equally disgraced;* the issue is, that *no labour is spared either by the Professors in teaching, or by the Pupils in learning*. The ambition of all here is honourable and hard-working."

The result of this excellent scheme of examination is,—that a degree, taken in the University of Louvain, was always accounted respectable, and, if connected with a high place upon the list, superior to any other throughout Christendom. And this too when the relative eminence of its Professors had, from a vicious patronage, (partly in the hands of the Academical, partly in the

* It does not appear that there were in Louvain any, at least any adequate, rejections.—Universities, which have not lavished their degrees on mere standing, or mere professorial attendance, (to say nothing of inferior considerations,) have endeavoured to make their examinations respectable, in *three* ways: which ways also admit of junction; for any two of them may be combined, whilst the whole three may also be united. These are, 1°. Rejection of incompetent candidates, by relation to some minimum of knowledge; 2°. Classification of candidates, by their proficiency in relation to certain amounts of knowledge; 3°. Subordination of candidates determined merely by their inferiority in knowledge, relatively to each other. The Edinburgh medical degrees, as they *formerly* were given, may stand as an example of the first; the Louvain and quondam (?) Cambridge degrees in Arts, (had Cambridge published and arranged its Pollai, may afford instances of the second added to the third; while those of Oxford, for nearly half a century, may supply the specimen of a combination of the first and second.—A union of the whole three is the condition of a perfect examination. The *condition* I say; for, besides that condition, there are further requisites of such perfection; as the competence of examiners, their obligation to impartiality established upon oath, the publicity of the examination, and the adequate appointment of its subjects.

hands of the Municipal, body,) declined beneath the level, more especially, of the Dutch and Italian Universities. For these Universities, while sedulous and successful in filling their Chairs with the most illustrious teachers, were always unfortunately remiss in the bestowal of their academical honours.*

* In the scattered biographies of the distinguished alumni of Louvain, I find it almost uniformly recorded, what was their rank in the graduation list of Arts. Of these I chance to have noted a few, which I may give in chronological order.—In 1478, Pope Hadrian VI. is Primus; in 1504, M. Dorpius is 5th; in 1507, R. Tapperus is 2d; in 1522, H. Triverius is Primus; in 1527, F. Sonnius is Primus; in 1529, C. Jansenius is Primus; in 1542, H. Elenus is Primus; in 1556, H. Cnyckius is Primus, and H. Gravius is 5th; in 1558, J. Molanus is 6th; in 1561, M. Hovius the canonist is only 46th, and G. Estius, the great theologian, 7th; in 1572, however, the greater L. Lessius is Primus; in 1575, P. Lombardus, Archbishop of Armagh, is Primus; in 1599, Du Trien the logician is Primus; in 1604, C. Jansenius (from whom the Jansenists) is Primus; in 1606, the philosopher Fromondus is 3d, &c. &c. &c.

APPENDIX III. EDUCATIONAL.

(C.) ON A REFORM OF THE ENGLISH UNIVERSITIES, WITH ESPECIAL REFERENCE TO OXFORD; AND LIMITED TO THE FACULTY OF ARTS.

ANY project for the reform of old and wealthy schools, like the great English Universities, is beset with difficulties, if practical possibility is to be combined with theoretical (not to say perfection, but) improvement. It is comparatively easy to devise the scheme of a faultless University, if we are allowed to abstract from circumstances. It is easy, even, to discover and to expose defects. Nor is it difficult to trace,—how an ancient institution may gradually degenerate,—how certain private interests may succeed in gaining a preponderance over the common good,—how these interests, if left unchocked, may introduce, foster, and defend the most calamitous abuses,—until, at length, the seminary may be, *de facto*, the punctual converse of itself, *de jure*. And such, in truth, is the condition of the Universities of Oxford and Cambridge; for no greater contrast can even be conceived, than are exhibited by these venerable schools, in what they actually are, and in what they profess, and, as controlled by statute, must profess themselves to be. In two of the preceding articles, (pp. 401–478,) I have endeavoured to signalise and to explain, how these Universities, as seminaries of education, present an almost diametrical opposition between their actual and their legal existence. By statute, they are organised as schools of Theology, Law, Medicine, and (as a preliminary of all liberal professions) of the liberal Arts; but, in fact, the only instruction which they now afford, is in the lowest department of this last faculty alone. Intra-academical study is now illegally commuted with extra-academical standing. Degrees,—privileged certificates of competency,—evacuated of all truth, are now lavished without the legal conditions of university instruction and university examination. In short, the public incorporation and its public instruction are now illegally extinguished; illegally superseded, but not reasonably supplied by the private Houses and their private tuition.

In fine, the statutes of the institution are now only performed through a system of perjury, disgraceful to the school, disgraceful to the country, and as pervasive in these Universities, as it is, fortunately, elsewhere unexampled.

So much I have alleged, because so much, I am convinced, is true. But I would not assert, that what has been irregularly abolished, is all deserving of restoration, nor, that what has irregularly sprung up, is all deserving of abolition. On the contrary, the very fact, that a state of right could have been so totally, and yet so quietly, reversed, affords a presumption that what was passively abrogated, was itself but feeble; and though, with proper fostering, the feeble might have ultimately waxed strong, still it would be a rash conclusion, that in the old and legal there was nothing but good, in the new and intrusive nothing but evil. At present, waiving all discussion in regard to the professional Faculties, and limiting our consideration to the school of liberal, or general education,—to the fundamental Faculty of Arts alone; it will more than suffice for what we can at present even perfunctorily accomplish, to inquire:—How do the English Universities, how, in particular, does Oxford, the principal of these, execute its one greatest, nay, now, its one only educational function,—*cultivate, in general, the mental faculties, prepare its alumni for any liberal pursuit in life, by concentrating their awakened efforts, in studies (objectively) the most important, and (subjectively) the most improving?*

In attempting an answer to this question, it is requisite to follow out a certain order. For, it is evident, that before proceeding to consider what *ought to be*, we should have previously ascertained what *is*, accomplished. I shall, accordingly, inquire and endeavour to determine,—first of all, what Oxford, as an instrument of education, does actually perform,—*Oxford as it is*; and thereafter, how, in consistency with its institutions, it may, in this respect, be improved,—*Oxford as it might be*.

I. *Oxford as it is*.—It would be difficult, perhaps impossible, to determine, with sufficient accuracy, the general efficiency of Oxford, as compared with any other University. But Oxford, as it *now* exists, is not a single educational organ. It is a congeries of such organs; each of its twenty-four private Houses constituting one; and, at the same time, the public University, in its Examination for the primary degree, affords an irrecusable standard by which we may very accurately measure the relative

efficiency of these several organs. If, therefore, we find, that these, compared among themselves, afford, in the Examination, for a series of years, very different and still very uniform results; we shall be entitled to infer, that one House is comparatively a good, another comparatively a bad, instrument of education;—be warranted to determine, even on an Oxford standard, what every Oxford House does, may, and should accomplish;—be enabled, in fine, to generalise the circumstances, by which such accomplishment is there furthered or impeded;—and, consequently, to judge what are the most feasible measures, for the reform and improvement of this University. The same comparison, with the same results, may also, it is evident, be instituted between the efficiency of the same House at one period, and its efficiency at another.

Taking, therefore, as the standard of academical proficiency the public Examination in its two Departments, and its four Classes of Honour; I proceed to apply this to the several Houses. And (as shewn in *Table*, pp. 746, 747) in two different ways: the one giving the comparative eminence of those *educated* in each House, (there I.); the other, the comparative eminence of those who in each House act as *educators*, (there II.)

In reference to the *Instructed*: The Table shews of each House the number of its undergraduates (a); then the absolute number of the honours obtained by them in each department and in every class (b, c); then the absolute number of Double Firsts (d); lastly, the number of First Class Honours in either department in proportion to the number of competitors (g, h); but previously, by the same relation, the classes of each department valued from lowest to highest, as 1, 2, 3, 4 (e, f). On this proportion in L. H., proceeding only to the first decimal, I have arranged the Houses; when equal in L. H., their difference in D. M. has then determined the order. I have taken, as a sufficient period, the ten years ending with 1847; (the Calendar of 1848 being the only one within my reach when the Table was abstracted;) and I was compelled (for the same reason) to make the number of undergraduates of the last year stand for an average of the whole ten. [(1853.) This part has been revised and corrected.]

In reference to the *Instructors*: The Table shews, in each House: first, absolutely, the amount and quality of the Academical Honours belonging to its several educators, whether Tutors or Readers (i, k); and secondly, the Highest Honours, in either department, in proportion to the number of these educators (l, m).

—This latter part of the Table is (for the reason assigned) wholly calculated on the year 1847.*

Looking, then, to the Table, and to its *first* part;—we here see, that one House differs marvellously from another in what it performs. The esprit de corps is fully as remarkable in Colleges as in Regiments; although individual competency and courage must, on the average, be pretty much the same in all. Thus, while one Regiment is for generations known as the “fighting,” another as “the flying, —;” so (what is more intelligible,) in one College a first class is merely of commonplace respectability, whilst in another it is a kind of secular dignity, and not to be plucked, there even confers an enviable distinction.

Comparing, therefore, the Houses in *Literæ Humaniores*:—In

* This Table thus affords, (apart from inaccuracies,) not the very truth, but only a sufficiently close approximation to it.

The number of *Undergraduates*, in the several Houses, ought to have been calculated, not on one, but on an average of all the ten years. The same applies to the *Instructors*. Their average academical eminence, for the several Colleges, ought to have been estimated by a comparison of every year, and not assumed on the last alone. But as I was unable, as stated, when the abstract was made, to accomplish this, the Table must stand as it is; for I have neither time nor patience to reconstruct it. Nor do I think, that the result would vary in any point of importance; for collegial accommodation has been long inadequate; and, at the same time, lodging out during the first four [three] years is not allowed; whilst the standard of instruction in a House does not frequently nor rapidly change. It might, however, be interesting, had we Tables of the kind, adequately executed,—say for every five years.

In regard to the *valuation* of the Classes, on which I have arranged the Houses, in their educational eminence, I have a remark to make.—This valuation is unfavourable to *First Classes*; therefore, to the higher Colleges, which preponderate in Highest Honours. For, while the three inferior classes testify, that a candidate is above one minimum, they testify that he is below another; whereas, the First Class, while it testifies that a Candidate is above a certain minimum, takes no account of how much or how little he exceeds it. It thus contains and equalises the most unequal proficiencies; that which is just competent, and that which is far more than competent. I was, however, unwilling that any possible objection should be taken on the ground,—that the valuation was, in any respect, arbitrary. Accordingly, I allow every advantage to those Houses which rejoice in their amount of respectable, though humbler honours.

A Double First evidences both talent and a power of application. But it only proves that a candidate (with competent ability) has prepared himself in two complements, each equal to the amount required for a First Class. Of more it testifies nothing.

TABLE ;

Shewing the comparative efficiency of the OXFORD HOUSES, as
Seminaries of Education.
 (1853. This part revised and corrected.)

Houses arranged according to their proportion of valued graduation Honours, primarily in Literæ Humaniores; by (e.) From 1838 to 1847.	1. THE INSTRUCTED.—Undergraduates, (from 1838 to 1847,) their															
	(a) Number in 1847.	Honours absolutely.								Honours in proportion to their numbers.						
		(b) Literæ Hum. Classes.				(c) Disc. Math. Classes.				(d) Double Firsts.		Classes valued** and added.		First Classes.		
		i.	ii.	iii.	iv.	i.	ii.	iii.	iv.			(e) Hom.	(f) Math.	(g) Hum.	(h) Math.	
Balliol.....	84	17	22	22	32	6	11	4	4	3		1 : 0·4	1 : 1·2	1 : 5	1 : 14	
Merton.....	38	3	14	12	10	4	2	...	1	...		1 : 0·4	1 : 1·2	1 : 13	1 : 9	
Corpus.....	24	5	6	3	8	2	1	...	3	...		1 : 0·4	1 : 1·7	1 : 5	1 : 12	
Lincoln.....	56	9	13	15	12	2	2	3	2	...		1 : 0·5	1 : 2·5	1 : 6	1 : 28	
Magdalen..	27	2	7	9	8	...	1	...	3	...		1 : 0·5	1 : 4·6	1 : 13	0 : 27	
University	63	8	13	10	11	4	4	3	5	1		1 : 0·6	1 : 1·6	1 : 8	1 : 16	
Wadham...	87	4	17	29	22	1	6	4	13	...		1 : 0·6	1 : 2·0	1 : 22	1 : 87	
St John's..	66	7	9	17	10	5	6	2	2	2		1 : 0·7	1 : 2·7	1 : 9	1 : 13	
New College.....	20	1	3	3	10	...	2	...	...	...		1 : 0·7	1 : 3·3	1 : 20	0 : 20	
Christ Ch.	186	8	31	35	40	3	11	9	17	...		1 : 0·8	1 : 2·3	1 : 23	1 : 62	
Exeter.....	134	6	20	31	22	5	4	4	9	1		1 : 0·8	1 : 2·7	1 : 22	1 : 27	
Brazenose	95	3	10	29	18	5	3	3	12	...		1 : 0·8	1 : 2·0	1 : 32	1 : 19	
Queen's....	74	3	8	14	20	2	2	2	8	1		1 : 0·9	1 : 2·8	1 : 27	1 : 37	
Oriel.....	82	6	10	10	17	2	2	...	4	1		1 : 0·9	1 : 4·6	1 : 15	1 : 41	
Trinity....	83	10	6	9	13	3	3	2	5	1		1 : 0·9	1 : 2·6	1 : 10	1 : 28	
Magdalen Hall.....	85	3	11	13	14	...	1	2	6	...		1 : 1·0	1 : 6·5	1 : 28	0 : 85	
Worcester	94	8	10	8	13	1	1	1	6	...		1 : 1·0	1 : 6·3	1 : 12	1 : 94	
St Mary's Hall.....	33	1	2	4	9	...	...	...	1	5	...	1 : 1·2	1 : 4·7	1 : 33	0 : 33	
Jesus.....	57	...	6	5	11	1	...	...	2	...		1 : 1·5	1 : 9·5	0 : 57	1 : 57	
Pembroke	72	1	5	9	4	1	...	...	1	...		1 : 1·8	1 : 14·4	1 : 72	1 : 72	
New Inn Hall.....	28	1	1	2	4	1	...	1	1	...		1 : 1·9	1 : 4·0	1 : 28	1 : 28	
St Alban's Hall.....	8	...	1	...	...	...	...	...	...	...		1 : 2·7	0 : 8	0 : 8	0 : 8	
St Edmund Hall.....	32	...	...	2	5	...	...	1	1	...		1 : 3·6	1 : 10·7	0 : 32	0 : 32	
All Souls...	4	...	...	...	1	...	...	...	...	...		1 : 4·0	0 : 4	0 : 4	0 : 4	
	1532	106	225	297	314	48	62	42	110	10						

* Mathematical Reader.

† Latin R.

‡ Greek R.

§ Rhetoric R.

§ Logic

and Philosophy R.

¶ Divinity R.

** Class,—First = 4, Second = 3, Third = 2,

Fourth = 1.

TABLE—Continued ;
Shewing the comparative efficiency of the OXFORD HOUSES, as
Seminaries of Education.

II. THE INSTRUCTORS ; (as in 1847,) their

Numbers, Kinds and Honours.							Numbers in proportion to their First Class Honours.								
(l) Tutors (also Readers.)				(k) Readers (only.)			(i) Literæ Humaniores.			(m) Disciplinæ Mathematicæ.					
1 N. M.	2 N. M.	3 N. M.	4 N. M.	1 N. M.	2 N. M.	3 N. M.	Teachers in gen.	Tutors.	Readers.	Teachers in gen.	Tutors.	Readers.			
1-0	1-0	1-0	...	1-2†	1-1*§	...	5:5	3:3	2:2	5:1	3:0	2:1			
1-3††	1-0	...	...	2-1*	...	...	3:2	2:2	1:0	3:1	2:0	1:1
2-0†	1-0†	1-0	...	...	...	...	3:2	3:2	...	3:0	3:0	...
1-0	2-0†	1-2	...	...	...	...	3:2	3:2	...	3:0	3:0	...
3-0	2-1*	...	...	?-?†	...	...	2:0	2:0	...	2:1	2:1	...
1-0	2-0	1-1	...	1-1*	...	...	4:3	3:2	1:1	4:2	3:1	1:1	
2-2	2-3	...	...	2-2†	2-1††	...	4:0	2:0	2:0	4:1	2:0	2:1	
2-2	2-0	...	...	...	...	...	2:0	2:0	...	2:0	2:0	...
?-?††; ?-?	1-2	...	...	...	...	...	? ) 3:1	?) 3:1	...	?) 3:0	?) 3:0	...
0-0	1-0	...	...	0-1*	2-0†	4-0||	5:1	2:1	3:0	5:1	2:0	3:1	
1-0	1-0	1-3	1-0	0-0†	0-0*	...	5:3	3:3	2:0	5:0	3:0	2:0			
1-0†	2-0†	1-0	...	4-1*	...	...	4:2	3:2	1:0	4:1	3:0	1:1	
1-1	3-0	2-0	...	2-1*	...	...	4:1	3:1	1:0	4:2	3:1	1:1	
2-0	1-0	2-1	...	...	...	...	3:1	3:1	...	3:1	3:1	...
3-0	1-2	1-1§	...	2-0||	...	...	4:2	3:2	1:0	4:1	3:1	1:0	
...			
1-0	2-1	...	...	0-3†	...	...	3:1	2:1	1:0	3:1	2:1	1:0
...			
2-1	1-0†	3-0	...	3-4†	3-0†	...	5:1	3:1	2:0	5:1	3:1	2:0			
1-2	2-0	3-1*	...	...	...	...	3:1	3:1	...	3:1	3:1	...
...			
1-0	...	...	...	...	...	...	1:1	1:1	...	1:0	1:0	...
...			
...			
							66:29	49:26	17:3	66:15	49:8	17:7			

†† From the Calendar of 1851, no Instructors being given in that of 1848.

‡‡ Until about 1837, New College exercised its unhappy privilege of examining and passing its own members, as candidates for a degree.

this department, we find that *four* Houses, (two Colleges and two Halls,) containing above a hundred undergraduates, have during the decade *no First Class Honours* at all.—Again, discounting these, and comparing only the Houses which have compassed this distinction, we find that one College is, on this standard, *eighteen times* more efficient than another.—Finally, the same discount being made, the *valued* classes afford a similar result; some Colleges, by a full average, in this the principal department, approving themselves *four and a half*, and, the discount not made, *ten, times* better instruments of education than others.

In *Disciplinæ Mathematicæ*, the difference, if less important, is hardly less signal. During the decade, *seven* Houses, (three Colleges and four Halls,) and with an average of undergraduates considerably above two hundred, shew *no First Class Honours*;—and of these, *two* (a College and a Hall) have *no Honour, even of the lowest*.—Again, discounting these, and taking only the Houses which have attained to a first class, still we find, in this respect, one College more than *ten times* superior to another.—Finally, making the same discount; on the criterion of the whole Honours *valued*, College excels College, as an educational organ, by nearly a *twelvefold* difference.

But in the last place, (*discounting All Souls and the three lower Halls*), and taking the *half* proportion of the *highest* College as a mean, we have the following results:

L. H.—In *Valued* Classes: *three* colleges are of the very mean ($1:0.8$); *nine* above; and *eight* below it.—In *First* Classes: of the mean ($1:10$), we have *one* college; above it *five*; and below it *fourteen*.

D. M.—In *Valued* Classes: we have above the mean ($1:2.4$) *seven* colleges; and below it *thirteen*.—In *First* Classes: there are above the mean ($1:18$) *five* colleges; and below it *fifteen*.*

* I may append the following proportions, though I see there are probably several minor inaccuracies. But I cannot go through the labour of correction; more especially as they are irrelevant to my argument, and do not affect the general result.

A) Literæ Humaniores. Proportion of—

All classified (923), to all (here) unhonoured graduates (1932?), as	$1:2.1$
The three higher classes (609), to all graduates below them (2110), as	$1:3.5$
The two higher classes (324), to all graduates below them (2395), as	$1:7.0$
The highest class (104), to all graduates below it (2615), as	$1:25.3$
The highest (104), to all other classes (819), as	$1:8.0$

Now, it may well be, that the very best of these Houses accomplishes far less, than, in other circumstances, it might. But this is not proved,—at least not obtrusively. It is, however, proved, that some of the Oxford Houses, throwing out the worst, and judging only by the most favourable criterion,—that some of the Oxford Houses *now* perform, as academical instruments, *five,—ten,—fifteen,—ay twenty* times more than others. But it is clear, that, unless from ignorance or compulsion, no one in his senses would employ a workman, pay him too the wages of a first-rate artificer, who is worse, not to say, five, ten, twenty times worse, than a brother operative. Yet the father, who would deem it unimaginable to send his son to a second-rate dancing-school, complacently enters him of a tenth-rate College; where the youth is soon, by precept and example, accomplished for life,—as a conceited ignoramus, a hopeless idler; whilst the State standing by, tolerates, nay protects the illegal monopoly, which a body of men, wholly unqualified, as a body, for instructors, have long usurped, in the privileged seminaries of the English Church and of the English nation.

Looking again to the Table in its *second* part, we see, in some degree, how these startling differences arise. We see, that the relative eminence of the Houses, estimated by the academical honours of the taught, is not at variance with the academical distinction of the teachers. We see further, how the general academical eminence of the instructors, is not such as to qualify them to assume, far less exclusively to engross, the function of academical education. A competent education supposes, that the educator possesses two, and two conjunct, qualities: 1^o, that he should be able to aid, to aid but not to relieve, his pupil in the

B) *Disciplina Mathematica*. Proportion of—

All classified (255), to all (here) unhonoured graduates (2618?), as	1 : 10 · 3
The three higher classes (149), to all graduates below them (1902), as	1 : 13 · 0
The two higher classes (108), to all graduates below them (1943), as	1 : 18 · 0
The highest class (45), to all graduates below it (2006), as	1 : 40 · 1
The highest (45), to all the other classes (210), as	1 : 5 · 0

C) *Both Departments*. Proportion of—

All the Mathematical (255), to all the Literary Honours (923), as	1 : 3 · 6
Exclusive honours in D.M. (136?) to exc. honours in L.H. (822?), as	1 : 6 · 0
Men honoured (958?) to men unhonoured (1796), as	1 : 1 · 9
First class in D.M. (45), to First class in L.H. (104), as	1 : 2 · 3
Men of First class in L.H. not in D.M. (79?) to whole class (104), as	1 : 1 · 3
Men of First class in D.M. not in L.H. (10?) to whole class (45), as	1 : 4 · 5
Double Firsts (10), to all other graduates (2855?), as	1 : 285 · 5
Double Firsts (10), to all other honoured graduates (958?), as	1 : 95 · 8

effort of attaining knowledge; 2°, that he should, in his own person, exhibit a pattern of learning, capable of inspiring his pupil with discontent at any present advancement, and a resolution to be satisfied with no humble acquisition. These conjunct conditions, the collegial instructors of Oxford are seen, by the Oxford standard itself, not only not to fulfil, but actually to reverse. "Ignorance on stilts." For they are, in general, unable either to assist their pupils in, or to animate them to, an ever higher progress; whereas they are peculiarly adapted to infect them with discouragement, to affect them with disgust, or to lull them into a self-satisfied conceit.—(*To say nothing of the Halls, &c.*)

As to *Literæ Humaniores*, the *Highest Honours* are not, even in this primary department, attained by the great body of those who assume the collegial office of education.—Of *Instructors*, sixty-six in number, above a *half* (37) are not of the First Class; of the *Tutors*, in number *forty-nine*, nearly a *half* (23) are similarly deficient; and the same is true of about *five sixths* (14) of the *seventeen* simple *Readers*. Only a *single* College (Balliol*)

* It afforded me great satisfaction to find, that Balliol, the oldest College in the University, stands so decidedly pre-eminent in this comparative estimate of the present efficiency of its Houses; a College, in which I spent the happiest of the happy years of youth, which is never recollected but with affection, and from which, as I gratefully acknowledge, I carried into life a taste for those studies which have constituted the most interesting of my subsequent pursuits.

I. *Looking to the Instructed.*

In the *first* place, the Honours being *absolutely* considered.—Here, *not distinguishing* the two departments:—Balliol surpasses every other House in the number of these, high and low, *indifferently added*, (117),—except Christ Church; but Christ Church, by far the largest House in the University, whilst it exceeds Balliol in the number of Honours, of all kinds and degrees, by one-fourth (29), exceeds it also in the number of competitors for these by five-fourths (102).—Again, *distinguishing* the departments:—Balliol maintains the same superiority in either, as in both.—Of *Highest* (or *First Class*) *Honours*; Balliol of all the Houses, exhibits,—most in the *combined departments* (23),—most in the *Literæ Humaniores* (17),—most in the *Disciplinæ Mathematicæ* (6). In the first and second respect, its Honours are, in fact, nearly double those of any other House; whilst Christ Church, a College so much more numerous, shows only of these, in the L. II., seven, in the D. M., three.

In the *second* place, considering the number of Honours *in proportion* to the number of undergraduates:—Balliol stands first, whether we *confound* the two departments or *distinguish* them.—And taking the *Highest Honours*: Balliol, in like manner, proportionally surpasses every other House, whether the First Classes be drawn indifferently from both departments or specially

has *all* its instructors, and these here amount to *five*, of the Highest Class; whereas, in *three*, *no* instructor whatever exhibits a similar

from each:—except two lesser Colleges; it being very slightly surpassed by Corpus in L. H., (not as corrected,) by Merton and Corpus in D. M.—Balliol, likewise, stands highest in the amount, absolute and proportional, of its “*Double Firsts*,”—three: this number being only not a third of the complement obtained in *all* the Colleges during the decade; St John’s alone exhibiting more than one.—Finally, *valuing the classes*, by making the fourth a fourth part of the first, Balliol (though this valuation be hardly fair, and hardly fair to it,) still predominates, both in the conjoined departments; and with two exceptions of close equality, in these as severally distinguished.—Of the relative superiority of Balliol in the inferior classes of Honour in either department, I must refer to the Table.

(In referring to the Calendar of 1851, which I have recently obtained, I find that the relative superiority of Balliol is still more decisively marked during the *three following years*. With far less than half the number of competitors, Balliol carries off three times (9) the number of the *highest literary honours* obtained by the largest college, Christ Church (3); whilst Merton and Corpus, the Colleges which, in this respect, are nearest to Balliol, show during these years no literary First Classes at all.—In the *valued classes*, Balliol is also superior (to say nothing of Christ Church) to both Merton and Corpus, in L. H.; but is rather inferior to these in D. M.—Balliol, University, and Christ Church have also each a Double First.)

II. *Looking to the Instructors.*

Balliol is the only House, (as stated in the text), in which *all the Teachers* (Tutors and Readers) are *First-Class men*; and the only College in which these are all First-Class-men in L. II. Balliol likewise surpasses every other House, both in the *absolute*, and in the *proportional* number of *Highest Honours* shown by its Instructors in the two departments, taken together; as also in the department of L. II. alone.—Indeed, only two Colleges besides Balliol, (Merton and Exeter,) have even all their *Tutors* of the First Class in L. II., and in the former of these the Tutors are only two. In Christ Church and Jesus the five *Instructors* have, in either department, among them, only a single Highest Honour.—Balliol, in fine, is the only College in which the *Readers* are all distinguished by the same Highest Honour; with the single exception of University, and in that college there is only a single Reader. These are three out of sixteen. (Of the Mathematical department, as of minor importance, I say nothing.)

This relative superiority, both in teacher and taught, shows how greatly collegial and academical efficiency is, in the present state of the English Universities, dependent on the character of the Tutors, and consequently, on the personal—on the accidental qualities of a Head; for the Head possesses in practice the nomination of Tutors, and, in general, the value of the instruction is determined by him. And Dr Jenkyns, as Master of Balliol, may fairly claim, for his own, the comparative excellence of his House; as mainly is it to his zeal, intelligence, and liberality, (though the merit of his predecessor ought not to be forgotten,) that this College has now long occupied so great, and yet so unobtrusive, a pre-eminence among the educational insti-

Honour. *Seven* colleges shew their instructors thus classified, in only the proportion—of *one in five* (2),—of *one in four* (1),—of *one in three* (4). And so forth.

The *Disciplinæ Mathematicæ* are, in difficulty and importance, greatly inferior to the *Literæ Humaniores*; but, even to this inferior department, the collegial teachers are, as a body, obtrusively inadequate.—The *Tutors*, the principal and only regular instructors, whilst not less than one-half of them have been of the First Class in L. II., show less even than a *sixth part* of the body in the *First Class of D. M.* They are even excelled in this by the mere Readers. *None* of the Colleges shews this Honour in the highest proportion; none, in fact, shews it in a higher proportion to the number of instructors, than as *one to three*, except two

tutions of Oxford. The undergraduates of Balliol are not drawn from the chosen pupils of a great classical school; they are not elected to the College for their previous acquirements, and after a wide competition; they are not a few foundation scholars, but, by a great preponderance, independent members. A certain minimum, indeed, of scholarship is, I believe, now wisely made a requisite of admission. But the main reason of the average superiority of the Balliol men, in the final examination, must be sought for, in a better awakening within the College, of their studious activity, and in their superior tuition. The single advantage which Balliol may claim, is—that its Fellowships are open; and the instructors, therefore, may be all competent to the work.—Merton, the second College, both in true historical antiquity, and in educational eminence, has great advantages, from its Portionists (14), a large proportion of its undergraduates, belong (to say nothing of its clerks) elected by the College, after a trial of comparative merit, and from a large sphere of competition.—But nothing could stand against Corpus, the third College as an educational institution, if it did not burthen itself by an extra weight of Gentlemen Commoners (6). The “Scholars” (20), who constitute the far greatest amount of its undergraduates, are all elected by the College from a wide enough circle; they are, therefore, in a great measure, picked men.—And so in Lincoln, University, and the other higher Colleges.—All this only enhances the merit of Balliol. But how much of collegial efficiency, with and apart from such advantages, is owing to the character of a Collegial Head, is known to those who have any practical acquaintance with the English academical system. By him, through the spirit which he diffuses, is principally determined the literary level of the Fellows, and altogether, I may safely assert, the efficiency of the Tutors. But to raise, of necessity, the standard of tutorial competency,—to stimulate effectually, certainly, universally, the exertion of the student,—and to direct it, withal, on the most improving applications; these are the primary conditions of any beneficial change in the present routine of the University and Colleges.

[In last century the open foundation of Balliol was among the worst in Oxford. Report of Oxford Commissioners, pp. 142, 168.]

(Queen's and University); whilst in *five* the instructors, and in *ten* the Tutors, are destitute of it altogether.—And so forth.*

This is just the result we should anticipate from knowing two things:—*Firstly*, that the collegial body (Fellows and Head) was not in general constituted by capacity and learning;—*Secondly*, that this body had been allowed furtively to usurp, from the University, the whole function of academical instruction. Hence may be explained:—1°, The lamentable inefficiency of the system as a whole;—2°, The mighty difference between Collegio and College, as academical instruments, either from the chronic accident of a better constitution, or from the temporary accident of a better collegial staff, and, consequently, a better collegial spirit;—and 3°, From this last accident, the remarkable contrast of a College with itself, in respect of its comparative efficiency at one period, and its comparative inefficiency at another. The Table manifests the two former; and it may be proper here to say something in illustration of the *third*.

But now, as I can afford only to be brief, I must limit the consideration to a *single College*, and to *First Classes*. I shall, however, take as the example, the most numerous, and in some respects the most favourably appointed College† in the University—Christ Church. Of the times to be compared, the one shall be the period of *thirty years* from the first institution of classified examinations for the degree, in 1807; the other, the period of *ten years* ending in 1847, (the year with which the Calendar before me terminates.) The one year (1837) intermediate between these two periods, is, for uniformity and the

* I am fully aware that an Examination like that of Oxford, is (to speak only of the L. H.) more to be relied on as a test of scholarship than of original talent,—in so far as these can be divorced; and that other evidence, say that of an able book, ought to be subsequently taken into the estimate. But however limited, (and of its impartiality I have never heard a doubt,) this Examination ought, in the absence of any other proof, so far to be relied on; more especially when a candidate, not of very nervous temperament, has aimed at academical distinction. But, in the case of the collegial instructors, such supplementary or countervailing evidence can rarely be adduced; for, with two or three honourable exceptions, none of them have enabled the world to gage their competency, by publication.

† I say only "in some respects:" for the "Students" of Christ Church are of those collegial "institutions" which Bishop Coplestone justly calls "*the scorst*," (above, p. 413, sq.); and Christ Church admits a more numerous body of Gentlemen Commoners, the academical opprobrium, than any other House in the University. (See below, p. 812.)

convenience of numeration, omitted. The former period, be it observed, I shall call the *three decades*, the latter the *one decade*.

Double Firsts.—In the *three decades* Christ Church, commencing the series,* shows of these, *twenty-nine*; whilst all the other Houses have, among them, only *thirty-two*. The former and latter have thus, on an average, severally, about *one Double First a-year*: but the honour, in proportion to the number of undergraduates, is in Christ Church, (with its 186,) rather more than 1 : 6; in the other Houses, (with their 1346,) rather more than 1 : 42. The College is thus *seven times* superior to the University.—In the *one decade*, things are, however, marvellously changed. For whilst the other Houses maintain the proportion of 1 : 45; Christ Church, having now *no Double First*, sinks to the negative proportion of 0 : 186,—*disappears*.

First Classes in Literæ Humaniores.—In the *three decades* Christ Church can boast of these honours,—*ninety-seven*; that is, in their proportion to the number of undergraduates as 1 : 1·9; whereas the other Houses, together, have of these only *two hundred and forty*; that is, in the same proportion, as 1 : 5·6. Christ Church, in this respect, is thus ahead of the University, in a *threefold proportion*.—The superiority is however reversed in the *one decade*: Christ Church now showing a proportion of only 1 : 9·0; whilst the rest of the University shows a proportion of 1 : 4·6,—that is, beats the College by *two to one*.—In the *three decades* of these honours: Christ Church has an annual average of 3·2; the other Houses an annual average of only 8·0.—In the *one decade*, on the contrary, Christ Church exhibits only an annual average of 0·7; whilst the other Houses exhibit an annual average of 9·7. Christ Church has thus fallen to little more than a *fifth* of its former height; whereas the University at large has, by nearly a fifth, arisen.

First Classes in Disciplinæ Mathematicæ.—In the *three decades*, Christ Church has of these, *seventy-two*; that is, in the proportion of honours to numbers, as 1 : 2·4; whilst the other Houses have of these only a *hundred and thirty-six*; that is, in the same proportion, as 1 : 10·0. The College thus beats the University by more than *four to one*.—In the *one decade*, however, this relation of superiority is again reversed; the University

* At the head of the series stands—*Robertus Peel*.

now beating the College by more than *two to one*: for whilst Christ Church has sunk to a proportion of 1 : 21·0; the other Houses continue to show that of 1 : 10·2.—In the *three* decades, the annual average of Christ Church is, 2·4; of the University at large, 4·5.—But in the *one* decade, whilst Christ Church has only 0·3; the general average, per annum, is 4·2. Thus the efficiency of the other Houses remains nearly stationary; whereas that of Christ Church has dwindled even to an *eighth*.

Such is the remarkable contrast of a College, in the spirit of study, to itself; Christ Church, in the former period, rising as proudly, far above the level of the University, as, in the latter, it has subsided humbly, far beneath it. A display of the causes of this declension I leave for those competent to the task; but it will be found, I am assured, in the higher instruction and the higher example, consequently, in the higher standard and higher determination to attain it, once so honourably prevalent in the society, and now so unhappily suspended. But such fluctuations—such lamentable falls are only possible in an ill-regulated University; and it should be the aim of any academical improvement of Oxford, no longer to abandon the welfare of its students to the accidents—of private effort, the exception, of private remission, the rule, but securely to preserve, by public measures, in equable and proper tension, the exertion of all its alumni.

Such (apart from all consideration of the objects taught) is the present state of educational efficiency in the Oxford Houses, as exhibited by the standard of the Oxford Examination. The institution of this standard was, indeed, decisive: it constitutes even, as will hereafter be apparent, an epoch in the fortunes of the school. It is destined, in the long run, to raise the University to its ancient supremacy above the Colleges,—or rather the Colleges to their proper level; nor needs it any wizard to foresee, that the public Examination must issue in the overthrow of the present private and depressing usurpation. For meting, to a certain extent, the proportion of ability and acquirement found in its several graduates, this their relative proficiency it signalises and publishes to the world. The world is thus now enabled, as it was always entitled, to ask:—*Why should the public, and exclusively privileged, education of Oxford be abandoned to those—whether College Heads or College Tutors—whom Oxford herself reports, as comparatively incompetent; and this, moreover, to the banishment, from academical usefulness, of those whom*

Oxford also reports, to be of the worthiest among her sons? The answer is precise. This is done: 1°, because the Heads of the collegial interest, were for a certain personal advantage in the state and church, unconstitutionally raised by a detestable prime minister (by Archbishop Laud,) to government and supremacy in the University, though, as a body, wholly unable, from their lights, and still less inclined from their interests, to administer the University, in furtherance of its essential ends. 2°, Because the collegial bodies have, through their Heads, for their private behoof, and, in violation of oath and statute, superseded the University in the office of instruction. 3°, Because these bodies not being, in general, constituted by merit, their members, though latterly monopolising all privileged education, have been, in general, unable to reach even the higher ranks of academical sufficiency, far less the eminence which ought to be required of academical instructors. And this last fact,—that the collegial monopolists of university education are not in general the persons to be constituted into the guides, patterns, preceptors of studious youth:—this is proved, in the first place, by the standard of academical sufficiency, the examination for degrees; and in the second, by a comparison, through an adequate period, of one House with another, and even of one House with itself, in regard of its efficiency as an instrument of education. For though the standard of the Examination be far too limited, and even within its limits far from perfect; still, on the average, and in the absence of other evidence, it must be relied on; and this we may more securely do, when we find that the public eminence of its instructors, and the public eminence of its graduates, are, in a College, not only not discordant, but far more in unison than might, perhaps, have been anticipated. Now judging by this combined standard, unless the collegial interests, as a whole, had been altogether incompetent to the work of academical instruction, and left, in fact, without interference to do as little as it chose, the following results could not have been afforded. For, as we have seen, (*abstracting from All Souls and the Halls*), College varies from College, as an educational instrument:—1°, in the more important department of *L. II.*, on the higher standard of *First Classes*, (and deducting negatives) *eighteenfold*, and on the standard most favourable to mediocrity of *Valued Classes*, from *four to five fold*; 2°, in the less important department of *D. M.*, above *ten times* on the more ambitious criterion of *First*

Classes, (deducting negatives) and nearly *twelve times* on the humbler criterion of *Valued Classes*.

This difference of House and House ought, indeed, to fill us with astonishment; at least, it utterly astonished me. For though prepared to expect not a small, I was wholly unprepared for the mighty, contrast which the collegial comparison in the Table manifests. I was aware, of course, that men—that youths are in ordinary little more than the passive reflectors of the education which they chance to receive; but I was certainly predisposed to rate far higher the exceptive number of those, who, in a University like Oxford, would pursue their studies independently of all external constraint, and to whom the offices of a Tutor should prove, in fact, more impediments than aids. Others too there were, and in numbers not to be overlooked, whom no tuition could avail to raise out of the low level to which native incapacity had doomed them. Finally, there were many, who sought, privately and without their College, for the tuition which they could not, satisfactorily at least, find publicly or within. All these classes were distributed throughout the Houses, and all it behoved to take into account, as tending to bring the Houses to an average equality. On this equalising tendency I had calculated much—too much indeed. For the statistics of the Table show how uniformly, notwithstanding every equalising tendency, rank in the academical examinations is the result of a right preparatory tuition, and how rarely the honours of the University are won, except by competitors trained to victory through a course of sound collegial discipline. But such a discipline, though such be its effect, how seldom, if ever, is it now afforded by the Colleges—in full efficiency! For, admitting that the higher and fewer Colleges perform, in Oxford, all that, as educational institutes, they should and can; still on the other hand, the lower and more numerous Houses are seen, on the criterion of the University itself, to fail most signally in this essential function, which they pretend, and that exclusively, to discharge. Yet, in the midst of this manifold and obtrusive defalcation, the Church and the State look on; the nation is quietly defrauded of the education for which it has especially provided; whilst the exclusive privileges are still suffered to subsist, long after the conditions, on which alone these were originally conceded, have been illegally suspended. “Not individual persons only,” says the

great Herder, "but schools and universities, outlive themselves. In semblance, their body still survives, while the soul has long been fled, or they glide about, like shades of the departed, among the figures of the living. Once were they so useful, and there lay in them the germ of a great development. But all has its appointed limit. The form which still remains has overlived itself. Alas! to what a century do they recall us! To the strange tastes of long buried generations! There they stand, establishments of a bygone time, in all its pressure! They follow not the genius of the age, and, incapable of renewing with it their youth, have thus fallen from their ancient usefulness." But the English Universities, and Oxford in particular, though ancient, are not so much superannuated as diseased. Though onfeebled, certainly, they do not so much manifest the symptoms of death, as of a suspension, or rather metastasis, of life; for their original, their statutory constitution, is superseded, but superseded, not for public, but for private, advantage. The better hope, therefore, of their restoration. For the old and legal is gone; while no respect is due to the modern, which has only too long been suffered perfidiously to usurp its place. Oxford may, indeed, be resembled to a venerable oak; whose abated vigour is diverted from heart to bark, but this cortical life, now only manifested in its suckers, is, in fact, wholly expended in these parasitic offshoots, which, while they waste without replacing, are allowed to represent, as they conceal, the parent tree.

——— "*Stat magni nominis umbra.*

Qualis frugifero quercus sublimis in agro
Exuvias veteres populi, sacrataque gestans
Dona ducum; nec jam validis radicibus hærens.
Pondere fixa suo est, nudosque per aëra ramos
Effundens, trunco, non froudibus, efficit umbram:
At quamvis primo nutet casura sub Euro,
Et quamvis circum sylvae se robore tollant,
Sola tamen colitur."

II. Such being *Oxford as it is*, I now proceed to Oxford (I shall not say, as it *should*, but) *as it might be*. For I would propose a scheme of improvement, manifest and easy; but not insinuate that a better might not be devised. In fact, as already indicated, I look not alone nor principally to what is theoretically the best, but to what is practically the most feasible. I limit myself, likewise, to the fundamental faculty, that of Arts or liberal instruction, and to the lower department of that faculty,—to

that, in which alone the University now pretends to educate. From all higher and more ambitious proposals I refrain; refrain from all schemes of reform, which may lightly be desired, but may not lightly be accomplished. I would suggest obvious remedies for obvious vices; and should prefer making use of the means already in appliance, to seeking after others which may speculatively be superior. Accordingly, were the institutions of domestic superintendence and Tutorial instruction, even in themselves defective, I should be unwilling to supersede them; for the simple reason, that they are already established, and consuetudinary. It is easy also to wish, that Headships and Fellowships were, as they ought to be, made the reward of literary eminence; but such a wish, it would be difficult if not impossible to realise. To found, therefore, a scheme of academical reform on this or any similar ideal, would be to frustrate it by anticipation. Any measure of practical reform ought, therefore, in my opinion, to attempt only to remove intolerable abuses, and to cure them only by the least violent substitutions. This, at least, in the first instance; for Reformation should be gradual. The great end towards perfection is, indeed, to initiate improvement. Every step forward necessitates an ulterior advance; so true is the adage which old Hesiod has sung,—*Ἀρχὴ ἡμῶν πατρίς*. Thus the Oxford Examination statutes were the first efforts of the University to rise out of the slough of abasement into which it had long subsided;* and the Examination, now affording an undeniable rule, by which to evince, that the Oxford Houses do not, in general, perform their arrogated office of instruction, in any satisfactory degree, at once

* Before the Examination Statutes passed, after the commencement of the present century, Oxford awarded her degrees, from first to last, without trial, and independently of acquirement.—*Crousaz*, writing in 1725, says:—"In Oxford the new philosophy is known as little to its members as to the Australian savages; and M. Bernard pleasantly remarks, that these worthies are a century or two behind their age, and perhaps will so eternally remain. The spirit of Protestantism is hardly breathed in Oxford." (*Logique*, P. I., S. i., c. 6.)—*Wendeborn*, who travelled through England before 1788, gives an amusing account of the Prases, Respondent, and the three Opponents, consuming the statutory time in profound silence, and the study of a novel or other entertaining work. (*Beschreibung*, &c., III. p. 218, 219.)—A similar description of the ceremonial is given by *Vicesimus Knox*, (who, if I recollect, was himself of Oxford.) It will be found in his *Moral Essays*, but the book is not at hand.—Cambridge, till lately, if not to the present day, bestows its degree on all and sundry who bring up a minimum of mathematics.

annihilates by stultifying, all resistance on their part, whilst it cannot fail of determining, in public opinion, the necessity of an academical reform. But, in truth, the most zealous champions in the cause, may be looked for in those intelligent individuals, whom accident has connected with the collegial interest, and in the less efficient Houses; for it is they who will naturally be most impressed with the academical inadequacy of their colleagues,—most ashamed of the inferior level of their Colleges,—and most active in originating and carrying out any feasible measure of improvement.—But the Examination not only manifests the urgency, it likewise affords the possibility, of reform. Through the influence of the Examination, the standard of literary qualification has in Oxford been gradually rising; and accordingly the melioration would now be easy, which formerly could have only resulted in failure. Though far inferior to the Oxford Examination, that of Cambridge, as earlier, caused likewise an earlier advance. For without such a criterion, how perverse soever it may be, the collegial elections would now, as heretofore, be there throwing merit out of account; and there the Tutors might still be whistling to their pupils the old tune, which, as pupils, had been piped to them;—Cambridge might still be Cartesian in Physics, as Physics are still, indeed, its peculiar Philosophy, and Mathematics all its Logic.

In the subsequent observations I shall pursue the following order:—i.) Recapitulate the contrast between the *legal* and *illegal* in the education which the great English Universities, and in particular Oxford, afford in their fundamental faculty;—ii.) State the *ends*, the full accomplishment of which constitutes the perfection of an university, as a school of liberal study;—iii.) *Compare the means*, now at work, especially in Oxford, with the *ends* which such a seminary ought to fulfil;—and iv.) Suggest such *changes* as may most easily be made, to render that school a more efficient instrument for the purpose of general and preparatory education.

i.) *Contrast between the legal and illegal, in the education which, with more especial reference to Oxford, the English Universities afford in their fundamental faculty.*

1°. *De jure*: The necessary academical discipline is public and common; given by the University in public prelection and public exercise.—*De facto*: The sole academical discipline is private and

peculiar; given by the several Houses in their domestic tuition. (See pp. 404, 405, 456, 460.)

2°, *De jure*: The University stands provided with a large staff of Prælectors or Professors.—*De facto*: These are now extinct, with the exception of a few, that remain “the shadows of a name.” All public Exercise, of old thought justly more important than prelection, is, in like manner, defunct,—nay even forgotten. (See pp. 409, 412, 440, 460, 461, 463.)

3°, *De jure*: The domestic instructor or Tutor, is any respectable graduate, chosen by the pupil, nor does it even appear that they must be of the same House; and the Tutor's principal function is, by statute, to look after his pupil's hair, clothes, and catechism.—*De facto*: The Tutorial office is exclusively usurped by the College Fellows, who are seldom Fellows from any literary merit; out of them the Tutor is nominated by the College Head, who is seldom Head for his ability or learning; * to a Tutor, so

* I have elsewhere (p. 413, sq.) shewn, how the collegial foundations were, in Oxford, not intended to supply ability, but to relieve want; and that their members were, in general, not dependent for their appointment on any academical merit. In addition thereto, and with special reference to the Heads, I may adduce the testimony of Mr Ward, late Fellow of Trinity College, and Deputy High Steward of the University of Oxford. In the Preface to his translation of the Oxford University Statutes (1845) he says:—

“There is nothing, therefore, in the original destination of a Head of a College, or in the statutory terms of his elevation, which involves his aptitude for a governor of the universal academical body. But is he at all better qualified for the purpose under the alterations of the old collegiate constitutions, which a change of the national religion, and no less of the national manners, has effected in the long course of four or five hundred years? The maintenance of the Roman Catholic Faith being the groundwork of collegiate foundations, the founders have, in almost all cases, insisted on their establishments being governed by an ecclesiastical person; and even where the statutes are not imperative on this point, the natural course of things leads to the same result. Of all the nineteen Colleges, only one at this time is governed by a layman. The Heads of Colleges are, as has been said before, elective; and it will readily appear, that if the founders themselves left the general advantage of the University quite out of view, while considering the qualifications of their principal College officer, the interest and position of the statutory electors are nearly concerned not to supply the defective ingredient. On the avoidance of the Headship, one place is of course gained by every Fellow who has a vested interest in the foundation, but an adroit exercise of the franchise may convert the single vacancy into two or more steps of advancement to the junior members, and the election, in consequence, *usually falls on the incumbent of the best living* or other office or preferment belonging to the society, and his promotion creates a fresh vacancy, perhaps a series of

qualified and appointed, every intrant to University and College must subject himself; and on this Fellow, or his associate Tutors, is the University now wholly dependent for all the academical discipline afforded to the alumnus. (See pp. 410, 417, 441.)

vacancies. But it may be said that the motive of interest would only attach to a portion of the electors; another remains, which must equally affect the whole body, or at least the residents. All the College codes give most extensive powers to the Head of the society; he must be constantly in residence, too, within the same precincts as the Fellows; it stands to reason, therefore, that a much more effective and natural consideration in the choice of a future next-door neighbour, who should be a censor, and must be a superior, *will be his character for complaisance and inoffensiveness, rather than any overstrained anxiety for the honour or advantage which will accrue to the University. A good, easy Head of a clerical club will be in much greater demand among its thirty or forty Fellows and incumbents, than a gifted sage, if any such the society possesses, who will exert himself to improve the system of instruction pursued in the University.*

"If, therefore, the disposition to acquiesce in the existing state of things within the walls of his own College, constitutes, in all likelihood, the most operative recommendation for the Head of a House, what hopes can be fairly entertained that he will be more energetic in his accessory character of a Governor of the general academical corporation? But it is only necessary to look to their own volume of the Caroline statutes, to form a judgment of the legislative capacity of the Board; for they have there put it on record, under the name of Additions to Land's Code. The staple of these additions is the substitution of one form of words for another, *equally untrue or inapplicable to the present times; fresh incense offered to mere rank and wealth, and new sumptuary enactments, which must be illusory, so long as Land's Statute (Tit. iii. sect. 1) is suffered to remain unrepealed, and to drive all the Undergraduates of the University into some twenty Colleges and Halls, never calculated by their founders for the superintendence of a fifth of their existing numbers.* It may be sufficient here to state, generally, that at about the commencement of the present century it became apparent to the University itself, that, either from the natural working of the Caroline Code, or from its formalities only having been kept up, whilst its spirit had been allowed to expire, *Oxford had virtually abdicated instruction, and was converted into a mere market of degrees for those persons who could throw away the time and afford the pecuniary means, which had become the chief conditions for acquiring them.* An effort was therefore indispensable, and the University was saved from extinction as a nursery of learning, by the New Examination Statute—a vast improvement, no doubt, upon the previous method, but still confessedly, at the present day, after forty years' experience, and a multitude of amendments, liable to very great and striking objections.

"From a legislative body, composed like that which has been described, *it is hopeless to expect any comprehensive scheme of reformation proceeding from itself:* perhaps it is also unreasonable, for it never has legislated independently on a great scale," &c. (p. ix. sq.)

As contrary to reason, contrary to statute, and contrary to oath, the present system (if system it may be called), can not long endure. The necessity of perjury must be made to cease; law and fact must again be brought into union, and their subsequent separation should be precluded. Finally, the actual ought to be approximated to the rational. Such approximation is not, however, to be accomplished by a mere return from the modern and illegal to the old and statutory. For though the statutory constitution of the University and its instruction was, in former ages, far superior to the mutilated fragment of education now long alone precariously attempted by intrusive, interested, and incompetent means, it would, as has been said, be a rash inference to conclude, that what is old, and even statutory, is all good;—that what is now, and even illegal, is all vicious. This leads us to the second head of consideration.

ii.) *The Ends which a University in its fundamental faculty, that is, as a seminary of liberal accomplishment, is bound to propose.*

But before stating the ends of a University, it is proper to premise a distinction and explanation. For a University in ordinary, and in ordinary acceptance, involves two very different things:—involving 1°, what is properly the University, a school, to wit, for liberal or general knowledge; and 2°, a collection of special schools, for one, two, three, or more of the learned professions. In the former respect, the student *is considered, as an end unto himself*; his perfection, as a man simply, being the aim of his education. This is the end proposed in, what is academically known as, the Faculty of Arts or of Philosophy. In the latter respect, the learner *is not viewed as himself an end*, that end being now something *out of himself*: for not his perfection as a man, but his dexterity as a professional man,—in a word, his usefulness as an instrument, has become the aim of his scientific preparation. This end is that proposed in, what are academically known as, the Faculties of Theology, Law, Medicine, &c.; and in this relation, a University is, in fact, only a supplemental and contingent aggregation of special schools, the only connection that these have with each other, or with the University, being, that they all hold out to be *liberal*, that is, they all hold out to educate to professions which presuppose always a liberal accomplishment, if not always an education in the liberal faculty, or faculty of arts.

In certain universities, indeed, and in certain of their professional faculties, a degree is now given without a liberal education; but in these cases, the profession has ceased to be liberal or learned, and the instruction by the academical faculty is really that of a mere special school. *Pro tanto*, the University has, in fact, illegally abrogated itself; and it would be difficult to say, whether the English or the Scottish Universities have acted more contrary to law and common sense, in their grant of medical degrees, the former without *professional*, the latter without *liberal*, education. The latter certainly is the more dangerous to the public, if the more profitable to the medical professors.—Nor is historical fact here at variance with philosophical theory. This distinction of a University into *two* parts,—into a part essential or fundamental, and into a part contingent or accessory, is shown in the chronological development of academical institutions. The older Universities (as Paris, Oxford, &c.) originated in the fundamental Faculty of Arts, the other Faculties being subsequently by accident, and at different times, one or more of them, annexed. And at present, the English Universities, though still allowed to exercise the privilege of granting degrees in the special faculties, have, it may be fairly said, long virtually abandoned the relative instruction; so that Oxford and Cambridge are now what they were at first,—schools exclusively of liberal instruction, but of liberal instruction, it should be added, not in all, but only in certain arbitrary (and arbitrarily taught,) branches.

Limiting, therefore, our view by the limitation of the English Universities, to the essential faculty alone, the abstract ends necessarily proposed by a University may be stated, as in all, *three* :—1°, to supply competent instruction; 2°, to excite the requisite exertion; and 3°, to grant a true certificate of proficiency. These being the ends which a university necessarily proposes, the degree in which it accomplishes these, will necessarily determine the degree of its perfection.

To accomplish these abstract ends, a University must employ certain concrete means. But though means are necessarily conducive to ends, it is not necessary that each several end should be exclusively effected by its several mean. One mean may conduce to several ends, and one end may be subserved by a plurality of means; nay, what is directly an end, may also indirectly operate as a mean. Thus, the Examination for a certificate of proficiency, *i. e.* for a Degree, though its immediate end be the ascertainment

of a certain minimum of learning, yet, mediately, this Examination, with its proximate end, may become a powerful mean towards another end, the excitement, to wit, of exertion in the student. This, therefore, makes the disintiation and abstract distinction of the ends and means proposed by a University inconvenient, and without detail impossible; accordingly, in conformity to convenience, I shall simply enumerate, (attempting no speculative classification,) *as ends*, all that a University should accomplish, although these accomplishings may, strictly considered, often partake more of the character of means.

First end.—As a University, even in all its faculties, cannot teach the *omne scibile*, and as there is an order and subordination among the departments of knowledge; a University, more especially in its fundamental faculty, is bound to secure by preference those studies which, supposed by the others, are necessary, not only on their own account, but for the sake of ulterior progress. In other words: a University, though it cannot compass the eye of knowledge, is required to supply its introduction. This manifest principle has, however, too frequently been neglected in our modern Universities—nay, even reversed. Teaching every thing, they teach nothing:—

Νήπιοι, οὐκ ἐπέσταν ὅσῳ πλὴον ἤμιν πατέρες.

Second end.—A University should supply competent, and exclude incompetent, instructors. This supposes that the instructor should possess not merely an empirical knowledge of his subject, but a philosophical; that he should know it, not merely as a complexus of facts, but as a system of effects and causes; and that, besides his synthetic comprehension of the whole, he should have analytically examined how the parts are dependent on each other, and how they mutually concur to the constitution of the whole. If he teach an author, he must be familiar, not merely with the work he teaches, but with all the writings of his author, and the relative opinions of the learned. If he teach a doctrine, he must be acquainted with it, not merely in itself, but in its connections, scientific and historical. In short, as Aristotle admirably shows—"The one exclusive sign of a thorough knowledge is the power of teaching." (Metaph. I. i.) But how many teachers are destitute of all this knowledge, and never even suspect their deficiency! How many confidently profess, who are wholly unqualified to instruct!—But beside his ability to teach, an academical instructor should be actuated by a good will. He should be ready to solve

any difficulty propounded, and to afford aid and advice to his pupils in the conduct of their studies. This was, indeed, enjoined by statute in several of the older Universities; and in Oxford the public Readers (now defunct) were required to remain for a certain time daily after lecture, in order to answer all pertinent questions that might be put to them. (See p. 797, note.)

Third end.—A University ought likewise to place conspicuously before the eyes of the student, and, of course, more especially to secure in its instructors, high living examples of erudition and ability. For, in proportion as the academical standard is elevated, will be the discontent of its alumni with any pitch of attainment inferior to the highest, and their consequent effort towards an ever loftier accomplishment; whereas, the natural result of a low standard in the teacher, will be (independently of other evils,) self-contentment and conceit, or disgust and inertia, in the taught. The beginning—the middle—the end, indeed, of wisdom, is the consciousness of ignorance; the consciousness of ignorance is thus the condition of progress. Hence the aim of every intelligent governor of a University has been, even apart from formal instruction, to obtrude the highest patterns of learned talent on the immediate observation of its teachers and its taught, in order to repress, in all, any tolerances of mediocrity: aware, with Bion; that “The conceit of knowledge is the arrestment of progress;” as with Seneca,—“Multos potuissio ad sapientiam pervenire, nisi putassent, so pervenisse.” This enlightened policy I have elsewhere endeavoured to illustrate.* (See pp. 376, 379.)

Fourth end.—As the student comes (or must be supposed to come) to the University without a love of knowledge for its own

* The universal sense of mankind has indeed established this as a maxim of education. The following rise to my recollection:—

The Arabian Sage:—“A man is wise, so long as he seeks after wisdom, but a fool when he conceits it to be mastered.”

The Rabbi Eleazar:—“Where there is no reverence, there is no instruction.”

“Brassicanns asked of Erasmus,—How a man might become learned? The immediate answer was:—‘If he haunted the company of the learned; if he listened submissively to the sayings of the learned; if he diligently read and re-read the writings of the learned; but above all, *if he never deemed that he himself was learned.*’”

This may enable us to solve the seeming paradox:—In a country, where *learning* is rare, the *men of learning* are common; in a country, where *learning* is common, the *men of learning* are rare.

sako, as indeed he comes there, not with studious habits already formed, but, in fact, with these to be acquired; and as there are likewise objects of strong alien interest continually soliciting him to remit his efforts: a University is bound to apply such external incitements as, by relation to his previous dispositions, may overbalance all counter seductions, and render his studies, from the first to the last, more pleasurable than their intermission. For, as Isocrates and Aristotle have well expressed it:—"The roots of discipline are bitter, while the fruits are sweet;" and as Plato, followed by his greater disciple, untranslatably says:—"Πάν ἡθες δὲ καὶ ἰθὺς." Such a stimulus is furnished in the desire of distinction—in the goad of emulation,—affections strong in all, but characteristically strongest in the young, ("lovers of honour, yet still more lovers of victory"); and these, if they be constantly and efficiently applied, determine a sedulous application in the pursuit of knowledge, even while such application may still be irksome in itself. "In learning," says Bacon, "the flight will be slow [and low] without some feathers of ostentation;" and thus is it, that, through emulation and the passion for distinction, we are enabled to fulfil his precept:—"As man's nature runs either to herbs or weeds, let us seasonably *water the one and destroy the other.*" For, whilst mental effort is the one condition of all mental improvement, yet this effort is at first and for a time painful: positively painful, in proportion as it is intense; and comparatively painful, as it abstracts from other and positively pleasurable activities. It is painful, because its energy is imperfect, difficult, forced. But, as the effort is gradually perfected, gradually facilitated, it becomes gradually pleasing; and when, finally perfected, that is, when the power is fully developed, and the effort, changed into a spontaneity, becomes an exertion absolutely easy, it remains purely, intensely, and alone unsatiably pleasurable. For pleasured is nothing but the concomitant or reflex of the unforced and unimpeded energy of a natural faculty or acquired habit; the degree and permanence of the pleasure being also ever in proportion to the intensity and purity of the mental energy. The great postulate in education is, therefore,—to induce the pupil to enter and to persevere in such a course of effort, good, in its result, and delectable, but primarily and in itself irksome. "There is no royal road to learning." "The Gods," says Epicharmus, "sell us everything for toil;" and the curse inherited from Adam, that "in the sweat of his face, man should eat his bread," holds

good of every human acquisition. For "man liveth not by bread alone;"

—" *Vivere*

Non esse solum vescier æthere,
Sed laude virtutisque fructu
Egregiam satiare mentem."

And with immediate reference to the young; it would be peculiar folly to expect, that they, especially, should be ever made to climb the hill of knowledge, stinted of their natural requirements by the way,—the refreshment of honour, the stimulant of competition. These affections are implanted in us, implanted, consequently, for the wisest purposes; and although they may, of course, be misapplied, the inference, from the possibility of their abuse to the inexpediency of their employment, is futile. Nothing, indeed, can evince a profounder ignorance of human nature, or a more disgraceful neglect of the most efficient means within its grasp, than for a University—than, indeed, for any seminary of education, to leave unapplied these great promoting principles of juvenile activity; and passively to take for granted, that its pupils will act precisely as they ought, though with every temptation seducing them from effort, and no appropriate inducement supplied in favour of studious exertion.

Fifth end.—As knowledge (man being now considered as an end to himself) is only valuable as it exercises, and by exercise develops and invigorates, the mind; so a University, in its liberal faculty, should specially prefer those objects of study which call forth the strongest and most unexclusive energy of thought, and so teach them too, that this energy shall be most fully elicited in the student. For speculative knowledge, of whatever kind, is only profitable to the student, in his liberal cultivation, in as much as it supplies him with the object and occasion of exerting his faculties; since powers are only developed in proportion as they are exercised, that is, put forth into energy. The mere possession of scientific truths is, for its own sake, valueless; and education is only education, in as much as it at once determines and enables the student to educate himself. Nor is there time to lose. In fact, it is now or never; for, as Rousseau truly says:—"L'habitude de penser dans la jeunesse en ôte la faculté durant le reste de la vie."—The objects of knowledge, which combine more entirely this end with the first, ought thus to be the principal branches of primary academical education. To determine

what these objects, what these branches are, would lead us into a discussion which, at present, I willingly avoid; but the educational exercises employed by Universities in calling forth the self activity of their alumni, are the following:—1. Examination; 2. Disputation; 3. Repetition; 4. Written Composition; 5. Teaching, in order to learn; 6. Conversation with, questioning of, the learned; 7. Social study.—Of these in detail.

1. *Examination*.—By this is meant Examination in the course of study: and, perhaps, in the circumstances of our modern Universities, this, of all academical exercises, is the one most generally useful; provided it be fully and fairly carried out,—which it rarely if ever is.—In the *first* place, it affords a good, if not, indeed, the best of fields, in which emulation may be exerted; but the condition of this exertion is that the competitors be keen. Keen however they will be, if the examination be regular, frequent, and well conducted,—if their own number be large, and the individuals not too unequal,—finally, if the competition be public, and the accruing honour signal. Examination is thus incompatible with inertia.—In the *second* place, it constrains to accurate, minute, and comprehensive study,—in a word, secures the knowledge of a subject, in whole and in part, in itself and in its relations; (a repetition of the words, either of the book read or of the lecture heard, should, of course, be disallowed.) It thus calls out self activity, and requiring clear and distinct thinking, both in examiner and examinee, counteracts the prevailing pestilence of slovenly, desultory, effeminate reading.—In the *third* place, it educates to presence of mind.—In the *fourth*, to prompt and precise expression.—In the *fifth*, it abates conceit, and convinces of deficiency.—In the *sixth*, it impressively teaches, even the mere auditor.

Examination can be realized in two forms,—forms which may, indeed, should be combined. For it is—1° *oral*; 2° *in writing*.*

* The following is a very compendious abridgment of what Melancthon says in praise of academical Examinations, in his Declaration *De Studiis Adolescentium* (1529?) The whole oration is well worthy of perusal: it will be found in his *Declamationes*, t. I., p. 486; in the *Selectæ Declamationes*, t. I., p. 465 sq.; in the *Corpus Reformatorum*, vol. xi. p. 181; and in other collections.—“No academical exercise can be more useful than that of Examination. It whets the desire of learning, it enhances the solicitude of study, while it animates the attention to whatever is taught. Every student is alarmed, lest aught should escape him which it behoves him to observe. This anxiety incites him also to canvass every thing with accuracy, knowing that he must fully and perspicuously explain his understanding of each

2. *Disputation*.—This exercise is now obsolete, in fact, throughout our British Universities, and has only a very partial and pre-

several doctrine. In this fear, is found the strongest stimulus to the labour of learning; without it, study subsides into a cold, sleepy, lifeless formality. What we have only heard or read, come to us like the shadows of a dream, and, like the shadows of a dream, depart; but all that we elaborate for ourselves become part and parcel of our intellectual possessions. But this elaboration is forced upon us by examination; examination, therefore, may be called the life of studies, without which reading, and even meditation, is dead.—Against prejudice and error, there is no surer antidote than examination; for by this the intellect is explored, its wants detected and supplied, its faults and failings corrected.—Examination, likewise, fosters facility of expression, counteracts perturbation and confusion, inures to coolness and promptitude of thought.—Not less useful is examination in restraining the course of juvenile study within legitimate boundaries. Nothing is more hurtful, as nothing is more common, than vague and tumultuary reading, which inflates with the persuasion, without conferring the reality, of erudition. Wherefore, if examination brought no other advantage than that it counteracts the two greatest pests of education, found, indeed, usually combined, *sloth*, to wit, and *arrogance*;—for this reason alone should examination be cherished in our Universities. Against sloth there is no goad sharper or more efficacious than examination; and as to arrogance, examination is the very school of humility and improvement. By no other discipline is a soaring conceit so effectually taken down; and this is the reason, why self-satisfied pretenders ever fly examination, whilst those who think less of the little that they know, than of the much that they know not, resort to it as the most efficacious mean of improvement."

The subject of academical Examination is also treated well and at great length by a distinguished contemporary of Melancthon, the Flemish theologian Hyperius, but with more especial reference to his professional department. See his *Opuscula Theologica* (1570), pp. 364-436. After these older authorities in favour of examination, independently of its manifest utility, it may surprise us, that this exercise has, it may be roundly averred, been long obsolete in the Protestant Universities of the Empire; for the "*Examinatoria*," occasionally and privately opened by individual professors, to such students as may choose to attend, are not worthy of being mentioned as exceptions. It is not, however, difficult to explain the want; though Holland, and thereafter Germany, are the countries, where learning has long flourished most unexclusively in all its departments, and the Universities comprised the largest complement of the most learned men. For, in the *first* place, the excellence of their academical patronage, supplying the Universities with the highest quality of erudition, a course of professorial lectures afforded to the student instruction, better probably than the best publication upon the subject. These lectures, therefore, afforded what could not otherwise be so well obtained; and though merely teaching, the University was not superfluous,—as elsewhere.—But in the *second* place, what is of far more importance, there was, in general, no compulsion of attendance on any one academical course. In Germany, a professor had no monopoly

carious existence in any other. Disputation is, however, in a certain sort, the condition of all improvement. In the mental as in the material world, action and reaction are ever in proportion; and Plutarch well observes, that as motion would cease, were contention taken out of the physical universe, so all human progress would cease, were contention taken out of the moral. Academical disputation, in fact, requiring calls out, and calling out educates to, the most important intellectual virtues;—to presence of mind, to dominion over our faculties, to promptitude of recollection and of thought, and withal, though animating emulation, to a perfect command of temper. It stimulates also to a more attentive and profounder study of the matters to be thus discussed; it more deeply impresses the facts and doctrines taught upon the mind; and, finally, what is of peculiar importance, and peculiarly accomplished by rightly regulated disputation, it checks all tendency towards irrelevancy and disorder in statement, by astringing the disputants to a pertinent and precise and logically predetermined

of subject; he could lecture on any branch belonging to his faculty, though that had been previously selected by a colleague; and the same could every other professor, ordinary or extraordinary, indeed any qualified graduate of the faculty, do by him: indeed no exclusive privilege was accorded to any course. In these circumstances, there being no compulsion on attendance, examination could not be enforced; whilst, contemned by professors, and not desired by students, it naturally fell into desuetude. It was even opposed, and that on high authority, as contrary to academic liberty.—In the *third* place, it was less required in Germany than in other countries; for, to say nothing of other causes, literary merit being there always secure of promotion, and no literary merit there taken upon trust, the result was, (in the words of a celebrated professor of Goettingen), that “the industry of the German students was so great, that it became more requisite to restrain them from over-work, than to excite them to a profitable employment of their time,” &c.—(Meyners, *Kurze Darstellung - - der Goettingen*, (1808), p. 36.)

Still the want of examination in the German Universities was felt by intelligent writers on the theory of education; and beside the incidental testimonies in approval of the exercise, to be found in the treatises on academical instruction by Fichte, Schleiermacher, Tittmann, and others, its restoration was in 1825 formally argued by the celebrated Professor Eichstädt of Jena, in two solemn addresses to the University, in his capacity of Programmatarius, or Public Orator, entitled—“*De Examinibus in Academiis Revocandis.*” But Eichstädt was not peculiarly qualified for the work; and had he merely reprinted the Declamation of Melancthon, of which, however, he was unaware, he would have done more towards the result for which he contended, than by his own eloquence in its commendation.

order in the evolution of their reasonings. Accordingly, in the best of the older Universities, (as in Louvain,) nothing was taught by prelection in the fundamental faculty, which was not also gone over in the exercises of disputation and examination.*

* The greatest contrast between the older education afforded in the Universities and the more modern, is perhaps displayed in regard to the exercise of Disputation; and, assuredly, the comparison is not in favour of the latter. —Before the invention of printing, Universities were useful, nay indispensable, as organs of *publication* and learned intercourse. They were comparatively few in number; spoke one learned language; professed a common faith; the crowds whom they attracted from the most distant countries were immense; and one academical teacher might then dispense to hundreds, it might be to thousands, the information of which, except in such a literary centre, they could hardly have become aware. Yet these same schools justly considered their function of *prelection* as in importance greatly inferior to their function of *exercise*; and among the exercises which they sedulously enforced, that of *disputation*, regular and frequent, was the principal. With this, indeed, no other academical act was permitted to interfere. During the seasons of disputation all other instruction was suspended; and every man employed to secure an auditory the most numerous.—On the other hand, since the art of printing has totally superseded the Universities, as instruments of publication; and since their indefinite multiplication in every country, the divisions of religion, the introduction of the vernacular, combined, in general, with exclusive privileges to individual chairs, and vicious systems of appointment to these chairs themselves, have reduced Universities, from cosmopolite and catholic, to local and sectarian schools, schools likewise often monopolizing instruction, but with instructors comparatively inferior both in ability and learning: strange to say, the whole function of a University is now, for the most part, concentrated in the useless office of communicating information; that is, the academical teacher or professor reads to his auditors a course of lectures upon subjects which they, with far greater convenience, might study for themselves in books,—lectures, too, which were they ever printed, no one would probably ever dream of reading; whilst disputation, (if not every other exercise,) which public seminaries alone can realise, is utterly abandoned and even unknown.—Thus the Universities, of old, ably and faithfully discharged their higher and their lower duties; whereas of late they attempt, too frequently, only what is of least importance, and attempt this minor duty, only through inefficient means.—But could disputation, the practical exercise of reasoning, be again restored, (of course, in the vernacular of the disputants, and perhaps less limited, than of old, to mere logical form,) I have no doubt that it would constitute an era in academical efficiency. Lord Bacon has indeed recommended this. For whilst testifying, that the practice of disputation renders the mind prompt and all-sided, he proposes the establishment of what he calls a College of Controversies. By such an institution would be obtained all the advantages of a Debating Society, but with others of the highest importance, which are hereby not supplied; at the same time the serious disadvantages would be corrected,

3. *Repetition*.—As the end of study, is not merely to compass the knowledge of facts, but in and from that knowledge to lay up

which adhere to the practice of debate, when not under logical regulation and intelligent control. (In a professional education for the bar, an institute for practice, under a competent professor, in which all the steps of a legal process should, by the students themselves, be regularly gone through from first to last, and in concrete examples of every variety of action,—this would inure them to oral and written pleading before commencing practice, and compendiously supply, what cannot now be obtained at all from books or lectures, and to obtain which, however inadequately, months and years are often spent in an attorney's or writer's office,—a knowledge of form.)

As it is, indeed, and out of school, all profitable study is a silent disputation—an intellectual gymnastic; and the most improving books are precisely those which most excite the reader,—to understand the author, to supply what he has omitted, and to canvass his facts and reasonings. To read passively, to learn,—is, in reality, not to learn at all. In study, implicit faith, belief upon authority, is worse even than, for a time, erroneous speculation. To read profitably, we should read the authors, not most in unison with, but most adverse to, our opinions; for whatever may be the case in the cure of bodies, *enantiopathy* and not *homoeopathy*, is the true medicine of minds. Accordingly, such sciences and such authors, as present only unquestionable truths, determining a minimum of self-activity in the student, are in a rational education, subjectively, naught. Those sciences and authors, on the contrary, as constrain the student to independent thought, are, whatever be their objective certainty, subjectively, educationally, best.—In this respect, no writer is to be compared with Aristotle. For while his doctrine is, on every point, pre-eminently worth the knowing, still it is never to be adequately known, without considerable effort. He condenses always the most meaning in the fewest words; he omits whatever may by attention be supplied; he can, in fact, only be rightly understood, or intelligently admired, by a reader, who is familiar with his writings as a whole, and not unable to wrestle with the writer. Add to this, that the philosopher is an ancient; and the ancient associations of thought and language are so different from the modern, that their study necessarily educates the mind to a liberal expansion, in emancipating it from those fetters which the accidental custom of time and country would otherwise impose.—But what renders the study of Aristotle so peculiarly profitable for the more advanced student, renders the Aristotelic works no less improper as a primary exercise of thought; nor would it, in fact, be more absurd to inflict the food and exercise of Milo on the tyro athlete, than to introduce an unpractised thinker to philosophy, through the speculations of the Stagirite. An Alma Mater should consider, with the Apostle, that its alumni at first “have need of milk, and not of strong meat; but that strong meat belongeth to them as are of perfect age, and exercised to discern both good and evil.”

Of authorities in commendation of this exercise there need be no end. I shall quote only one, but he one of the highest;—the elder Scaliger. “Vives says—‘We profit more by silent meditation than by dispute.’ This is not

materials for speculation ; so it is not the quantity read, but the degree of reading, which affords a profitable exercise to the student. Thus, it is far more improving to read one (good) book ten times, than to read ten (good) books once ; and "*non multa sed multum*," little perhaps, but accurate, has, from ancient times, obtained the authority of an axiom in education, from all who had any title to express an opinion on the subject. "He who lives everywhere is at home no where ;" the friend of all is the friend of none ; nor is there, intellectually, a more contemptible character, than a Margites, "in omnibus aliquid, in toto nihil." This is indeed proverbially notorious : "Propre à tout propre à rien ;" "Jack of all trades and master of none." And, as they are not the healthiest, who eat the most, but who digest the best ; so, a University, as an intellectual gymnasium, should consider, that its "mental dietetic" is tonic, not repletory,—that its function is not to surfeit, but to stimulate, curiosity,—not to pour in a maximum of information, but through its information, (be it much or little,) to draw forth a maximum of thought. He, therefore, who reads,—to remember, does well ; to understand, does better ; but to judge, does best.—Nor did the Universities of old repudiate the principle ; and the academical distinction of *Lectio Cursoria* and *Lectio Stataria* would, were it explained, show that, in them, theory and practice were in union.*

true. For, as from the collision of stones [light], so from the collision of minds truth, is struck out. I myself am an example. For often do I meditate alone, long, and intently ; but without an antagonist,—unless I fight, all is in vain. A master indeed excites us to higher activity [than a book] ; but an opponent, be it by his obstinacy, be it by his wisdom, is to me twice a master." The words of Vives show, in what limitation this illustrious thinker meant his doctrine to be understood. "But in the sciences of contemplation, for meditation and exercise, we have silent thought and a pondering of the counter reasons ; thus do we penetrate more deeply into the knowledge of a thing, than by dispute or altercation, which more frequently confuses than sharpens the judgment." Both are right, and both their recommendations should be conjoined. Vives proposes one sort of intellectual effort, for one sort of science ; Scaliger, too exclusively, perhaps, proposes another, for all sciences, and, from his own personality, for all men. For, sooth to say, the Prince of Verona in his pride, and pride of strength, was somewhat of the literary gladiator. His great work is, indeed, purely polemical ; yet how many subtle thoughts and important truths, all admirably expressed, does not this, as indeed all the writings of that extraordinary genius, contain, amid a mass, it may be allowed, of now uninteresting matters !

* The older Universities, and particularly Louvain, constrained Repeti-

Our modern, stand, however, in this respect signally, contrasted with our ancient, schools. For if, in theory, all authorities be at one, in regard to the importance of this principle; how few are now the Universities which carry it out fairly into practice! Nay, even in some of them, where it is not actually violated, the usage has been accidentally determined,—less by enlightened views, than by the convenience of their teachers.

Independently, also, of its intrinsic importance, as a fundamental maxim of education, the principle acquires a relative importance, as a prophylactic against the pernicious influence of the world in after life. In this respect, more especially, holds good—"Non scholæ, sed vitæ, discendum." For in the bustle of life, few are able to realise what they may deem the best; and all of us are, more or less, seduced into the knowledge of a thousand things, tending only to amuse, tending only to distract and dissipate the mind. Superficiality (better expressed by the Greek Πολυπραγμοσύνη, by the German *Vielwisserey*.) is, in the world, indeed, the order of the day. Ours is emphatically "the reading age;" and the many are now sure to accord their admiration, not to the scholar who really knows the best, but to the sciolist who apparently knows the most. To counteract this hapless tendency, there is nothing but a good education,—a sound erudition; but as these are now unfortunately, in this island especially, at a sorry pass, with all our information, so various and so vast, we stand, as individuals, intellectual dwarfs, in contrast to the giants—the ignorant, but thinking giants of antiquity. "Cuncta nihil-que sumus." (See pp. 40, 41.)

4. *Written Composition*.—By this is understood an ordinary exercise in the course of academical instruction, and is either com-

tion (recapitulation, revisal) by statute. See, among others, Vernaleus, p. 281—Wytttenbach (Præf. ad Ecl. Hist. p. xxix.) notices, that the wisdom of our ancestors had destined vacations, not only for the health and recreation of student and professor, but principally "ad repetitionem instaurationemque studiorum.—Hæc *feriata repetitio*, ut per otium et minorem festinationem facta, plurimum valet ad interiorem intelligentiam; plurimum habet et voluptatis continua progressum animadversione, et incitamenti ad studii laborisque constantiam."—In Goettingen, and some other German Universities, there is an order of inferior academical instructors, whose competency is guaranteed by public appointment; they are called *Repetents*, and go over with the students the professorial lectures. But there the professorial lectures are worth that trouble; and the *Repetents* supply in part, but only in part, the want of public examination, &c.

bined with, or apart from, oral examination. As an improving effort, both of thought and its expression, writing has generally been commended. It is unnecessary, therefore, to dwell upon its uses. But to become fully and certainly profitable, it is astricted to conditions.—1°. The writing should be more or less limited, that is, be in answer to questions, more or less articulate. The student should not be left to roam at large; but be made to think precisely and pertinently, by confining him to certain definite points.—2°. The composition should be strictly and intelligently criticised. 3°. It should be read, at least written with the hope of being read, before a large auditory; and according to its merits, it should obtain immediate approbation, and co-operate towards ultimate honour.

5. *Teaching, in order to learn.*—The older Universities, all of them, regarded the exercise of teaching as a necessary condition of a perfect knowledge; in recent times, the Universities have, with equal unanimity, neglected this. Yet there can be no doubt, I think, of the superior wisdom of the more ancient practice. For teaching, like “the quality of mercy, is twice blessed; it blesseth him that gives and him that takes.” At present, we, of course, consider teaching only in the former relation,—only as the instruction of others, is, itself, an instruction of ourselves.—We have already seen (*Second end*, p. 765), that no one can rightly teach, who is not fully cognisant of the matter to be taught. But on the other hand, the preparation for, and the very process of, instruction, react most beneficially on the knowledge of the instructor,—if the instructor be what (intellectually and morally) he ought. If so: Teaching constrains him to a clear and distinct consciousness of his subject, in its several bearings, internal and external; it brings to his observation, any want or obscurity, lurking in his comprehension of it as a whole; and urges him to master any difficulty, the solution of which he may have previously adjourned. The necessity of answering the interrogations of others compels him, in fact, to interrogate and to answer himself. In short, what he had learned synthetically, he is now obliged, for the inverse process of instruction, to study analytically. But a combination of analysis and synthesis is the condition of a perfect knowledge: and Ovid only expresses Aristotle’s doctrine, that a capacity of teaching is the first index of an accomplished learning:—

“Quodque parum novit, nemo docere potest.”

This, however, as has been said, supposes that he who practises instruction, has the requisite talents and dispositions. If its conditions be not performed, what is called (but is not real) instruction, is not an improving act, in either relation. It is, at best, a mechanical effort; a mere pouring out of what had been previously poured in. And yet, too many, even of our academical instructors, are no better. Professing to teach, teaching is for them no self-improving process; and as to their pupils,—“*Ils siffleront de jeunes Perroquets, comme ils ont été sifflé eux-mêmes, lorsqu'ils appirent a devenir Perroquets.*”

Nor must it be supposed, that the older Universities, though enjoining, nay even enforcing, the practice of instruction, as a mean of learning, abandoned the higher academical teaching to the prelusive efforts of these student-doctors. On this, the monostich of Dionysius Cato states their precept and their practice :—

“*Disce, sed a doctis ; indoctos ipse doceto.*” *

* I have already (pp. 406, 462, 463) stated, how Universities as they arose and flourished, during the middle ages, made instruction by the learner, a necessary exercise towards a more perfect learning. Every Bachelor, or incomplete graduate, was required, in order to qualify him for the higher degree, to teach certain books or subjects; and every Master or Doctor was compelled by statute, and frequently on oath, to teach (*regere, regere scholas,*) for a certain period, which was commonly two years, immediately subsequent to graduation. During that period of compulsory prelection, he was said to be—*necessarie regens*; thereafter, if he chose to exercise his right of lecturing publicly, or in the University, he was styled—*regens ad placitum*. Important academical privileges were usually accorded to the *Regents*; and to them was, more or less, entrusted the ordinary government of the University. In Oxford and Cambridge, the distinction of the two Academical Houses (the Congregation and Convocation of the former, the Regent and Non-Regent Houses of the latter,) is founded upon the distinction of *regent* and *non-regent*; the signification of these terms had, however, for at least a century and a half, been, in these venerable schools, confessedly forgotten. (P. 462.) But in the English Universities, though, by statute, entitled publicly to teach, and though still there actually a member of the legislative and ruling body; the graduate would, if he now attempted to exert it, be probably denied his right of lecturing in “the Schools.”—In the Universities of Germany, on the contrary, though the graduate has there lost his ancient power of academical government, he still retains his privilege of academical teaching; for it is only requisite that he should farther write, and formally defend, what is called a “*Dissertatio ad locum*,” to enable him to lecture in the University, on any subject within the compass of his faculty, and to have his course or courses announced in the public “*Series Prælectionum*.” The opportunity thus afforded to all

6. *Conversation with, interrogation of, the learned.*—This may be reduced to the head, either of exercise by the taught, or of

graduates of publicly manifesting their learning and their ability, as teachers, is, with the admirable system of academical patronage, a main cause of the uniform excellence of the German Protestant Universities, as organs of information.—In other Universities, though the degree of Doctor or Master be, now as of old, the express conferring of a right academically to teach, this right is, however, *de facto*, now universally of no avail.

During the middle ages then, this exercise was justly regarded as of the highest importance. The Pseudo-Boethius (*De Disciplina Scholarum*, c. 5,—probably Thomas Cantimpratus, who, in the first half of the thirteenth century, gives a curious delineation of the academical usages of his time,) speaks of this exercise as follows:—"Tertio, quosdam habeat [studiosus adolescens,] quibus secreta doceat librosque legat, aliisque rudimentis informet; ut sic, intellecta sciat, scitaque exprimere discat, et expressione frequenti usum comparet. Usus magisterium propinat; alios namque docere, est propriæ facultati indulgere." An account is then given of the modes by which an audience was secured. This one scholastic testimony must stand for all; since there is no limit to the mediæval authorities in commendation of the exercise. The following, however, are a few, which recur to me, of the many metrical forms, under which the precept became academically current:—

"Condita tabescit, vulgata scientia crescit."

"Discre si quaris doceas; sic ipse doceris:
Nam studio tali tibi proficis atque sodali."

"Multa rogare; rogata tenere; retenta docere:
Hæc tria discipulum faciunt superare magistrum."

"Disce, doceque alios, sic tute doceberis ipse;
Atque tuæ solito certior artis eris."

In fine:—

"Qui docet, is discit; qui perdiscit, docet ille:
Doctus ut evadas, suadeo—Disce, Doce."

"Docendo discimus" has even subsided into an adage, not in Latin only. The Italian—"Insegnando s' impara," is an example.

From a remote antiquity, however, all philosophic thinkers concurred in the same truth. "To teach," says Plato, "is the way in which we learn most and best." And while Plato may represent the Greeks, Seneca, enouncing—"Homines dum docent discunt," declares what he himself repeats, and what is frequently confirmed by the other philosophers of Rome.—Again, Clement of Alexandria may stand a guarantee for the Christian fathers:—"The teacher adds to his learning, and is frequently a fellow disciple with those whom he instructs."—Finally, since the revival of letters the same unanimity of opinion is manifest. For passing over the exaggeration of those who, like Ringelberg, would elevate this exercise into a one exclusive mean of education, all authority acquiesces in the more temperate conclusion of Vives:—"Idcirco, nihil est ad magnam eruditionem perinde conducens, ut docere." And to terminate with the testimony of a learned Oxford prælector, logician, and divine; Bishop Sanderson used to say:—"I

instruction by the teacher. More properly, however, to the former. For it supposes, both an extra activity of the student in a questioning of his instructor, and likewise an extra information thereby drawn forth from the instructor, either in the shape of the special solution of an individual's difficulties, or of the special direction for an individual's pursuits. Nothing can be more useful in a course of study, than this privilege of interrogating those who are able to afford us satisfaction. Every one who, by his unaided efforts, has succeeded in conquering any department of knowledge out of the ordinary routine, knows, that he was arrested, often long, by difficulties which could at once have been removed by a master of the subject, either solving them himself, or directing to where their solution might be found. He knows, in short, that half his labour might have been profitably spared. "The questioning of the wise," says the Arabian adage, "is the half of wisdom;" and as the German proverb expresses it,—"*Mit fragen wird mann weiss.*" "*Multa rogare,*" &c., has been already quoted as an academical brocard.—(P. 778.) Accordingly, it has been the aim of every competent University, to supply the alumnus with such assistance. Hence the *Conversatoria* of the German schools; and in Oxford, when the education was still common, public, and legal, we have the following retained among the Caroline Statutes:—"Moreover, at the end of Lecture, the several Professors shall tarry for a time in the Schools: and if any scholar or hearer wish to argue against what they have advanced in lecturing, or may otherwise have any doubt, they shall listen to him with kindness, and satisfy the difficulties and questions proposed to them."—(T. iv., S. ii., § 4.)

7. *Social Study*.—We are social animals. "Man is the sweetest thing to man;" he is happier in company; and in company his memory and understanding are more alert. He, therefore, often studies better, when he does not study alone. It is an apophthegm of Hebrew wisdom:—"Obtain for thyself a preceptor *from* whom thou may'st learn, and a companion *with* whom thou may'st study." It is, in fact, as conforming to this requisite of our human nature, that those Universities which compel their alumni to live in common, can best vindicate the utility of academical Houses; for, in the community of a college life, the social conditions of study are most fully and certainly supplied. In a college, have learned much from my master, more from my equals, but most of all from my disciples." (See p. 359.)

especially in a college not too small, each pupil may select a companionship of study, conformed to his wants, in numbers, age, ability, and pursuit,—a society, of which the members are able to assist and encourage each other, by a community of labour, and by a sympathy or fellowship in feeling,—“*συμφιλοσοφείν, συμφιλολογεῖν, καὶ συνεπιδουλεῖν.*” Even Homer, after noticing the suggestive influence of man on man, observes, “That the lone thinker’s thoughts come slight and slow.” To him, indeed, we trace the origin of the Greek and Latin adage,—“*Unus homo, nullus homo;*”—a truth, which, propagated by Plato, Aristotle, and subsequent philosophers, had of old subsided into a common maxim of academical education.

Sixth end.—A University is farther bound to grant Degrees to those of its alumni who have accomplished their academical course, testifying to a certain proficiency in their studies; and to this end, it is also bound to have them tried, by competent, impartial, and conscientious Examiners. If, moreover, the candidates be placed,—1°, in certain classes, according to their amount of learning; or 2°, arranged according to their superiority, in reference to each other; or 3°, what is best, both these schemes of classification be combined:—in this case, a high or low rank in the classification will be regarded as an honour or a disgrace, and the Examination, especially if compulsory, and the candidates numerous, becomes a powerful, though not the one sufficient, mean of stimulating the activity of the student.

Seventh end.—But beside the more arduous studies, which prepare for others, and more powerfully exercise the mind; and beside the Instructors and Examiners competent to promote thinking, and to pitch high the standard of intellectual attainment: there is to be considered another class of sciences, with their teachers,—the Physical, to wit. These sciences,—easy and attractive in themselves, and, as commonly cultivated to some extent, at least, it is even disgraceful not in some degree to know,—require for their profitable study in private, the public exhibition of costly experiments, apparatus and collected objects. This exhibition a University ought to supply; and, at the same time, as a necessary concomitant, a competent monstrator. As amusing, popular, and facile in themselves, these sciences need no external stimulus; and as not the conditions of progress, either objective or subjective, it would be even an inversion of the prime purpose of a University, in its general faculty, to apply it. In these, all

that a University can safely require, is a certain amount of proficiency. Its honours, at least its higher honours, should be reserved as an encouragement to the more invigorating and fundamental studies; but which, as less popular, and for a time more irksome, are, if not externally—if not peculiarly promoted, sure to be neglected. At the same time, there is always a considerable number, a majority even of its alumni, incapable of progress in the higher departments, but whom it is not right in a University, as *alma mater*, altogether to neglect. To these, who would otherwise be left to idleness and its consequences, the physical sciences present an attractive and a not unimproving object of occupation. As Augustin says:—"Patiantur Aquilæ dum pascentur Columbæ." The doves, however, should not be tended to the neglect of the eagles. To discover, and to recall to unity, in Physics as in Mathematics, require inventive ingenuity and general ability;—though Bacon certainly asserts, in commendation of his method of discovery, that it actually "levels the aristocracy of genius." But, in either, merely to learn what has been already detected and detailed, calls out, in the student, the very feeblest effort of thought. Consequently, these studies tend the least to develop the understanding; and even leave it, for aught that they thus effect, in a state of comparative weakness and barbarism. (See pp. 40, 42, 273–325, 331 sq., 673 sq., 703 sq.) But as the many, not incognisant of this, have no conception even, of a higher cultivation, the Universities, if conformed to popular views, would be abased to the very lowest:

"Fallitur et fallit, vulgi qui pendet ab ore."*

* There is a sort of knowledge, both interesting in itself, and deserving even to be academically enforced, which ought to be derived from books alone; being peculiarly inappropriate for professorial instruction, indeed for any *academical discipline*. I mean every collection of results, which students, and even professors, take, and must take, only on report; for these results are mere facts, to be *passively believed*, satisfying our curiosity at no expense of thought, and hardly even cultivating the memory. Yet such departments of knowledge, modern wisdom has, in some Universities, established, even as imperative courses. One sufficing example may be taken from Ethnology; which, from the relation of languages, supplies us with information, anterior to all historic record, touching the migration of nations, and with the only certain basis, on which to divide and subdivide mankind, according to the affinity of race. This doctrine, most curious and important in itself, is, as a result to be taken upon trust, so limited, that it may be comprised in a brief book,—in fact, in a single table; whereas, *if intelligently known*, that is in its

Eighth end.—But an University, besides its exhibitions for the sciences of nature, ought, moreover, to supply its alumni with a complement of books, selected in accommodation to their studies and reasonable wants, which are by no means unlimited, and with every convenience, which is easily afforded, for consultation and reading; even though it did not accord to them the privilege of

grounds, it supposes an acquaintance with some ten, twenty, fifty—in truth, with above a hundred languages and dialects. Now, to institute a chair, for a professor to retail his second-hand opinions, is sufficiently foolish; but the lectures would be equally inept for academical education, were the professor, instead of speaking on the authority of others, himself a Mezzofanti and a Grimm, in one;—himself cognisant of all the relations of all the languages on which he founds: for the pupils would still be only passive recipients of another's dicta, and *their* comparative philology, at least, would, at best, be the philology of parrots.

“Dico ego, tu dicis, tum denique dicit et ille;

Dieta sed hæc toties, nil nisi dicta docent.”

Ethnology is thus misplaced, in being made a subject of academical discipline. Objectively, an important knowledge, it remains, subjectively, an unimproving mechanism.—How different in its effect is another philology! For nothing can better exercise the mind, than a rational study, either of the grammar of a known language, or of universal grammar, illustrated by the languages with which a student is acquainted. Here every doctrine of the teacher may be elaborated by the taught. Yet this most valuable science, (an applied Logic and Psychology,) and most profitable exercise of mind, is wholly neglected in our Universities; though, as I have said before, and I speak not without experience, to compass Sanctius and his commentators is a far more improving effort than to master the *Principia* of Newton.

In this point of view, even history is not a proper subject of academical discipline, at least modern history, more especially in the vernacular, and apart from the active examination and pondering of authorities. For though of great importance in itself, mere historical *reading* does not necessarily call forth, exercise, and develop the higher powers of thought. Moreover, the field of history is too extensive; and where, in a University, it is at all adequately taught, there is hardly a limit to the historical courses. In the German Universities, (and in their circumstances, I do not say improperly,) history is made an especial object of instruction; and, counting, I found that in a single University, for a single semester, the historical courses announced in the “*Verzeichniss*,” amounted, in all the faculties, to *eighteen*. In fact, if an academical course of historical lectures be compulsory, and not better than the best book upon the subject, it is not merely superfluous,—it is a nuisance. It is most proper, however, in a University to require for its Degree in Arts, a competent amount of historical reading, though it do not accord to such knowledge its higher honours; and it should likewise designate the most fitting books for its examination, to the attention of the student.

taking the works out, and, for a time, may deny them access to its more extensive libraries.

Ninth end.—A University should likewise possess a competent board of regulation and academical patronage. But the conditions of the competency of such a board are,—1°, that it should be *responsible, and fully conscious of its responsibility*, (therefore, properly nominated, small, not transitory, not absolute, and sworn); 2°, *intelligent and well-informed*; and 3°, as far as possible, *with every motive for, and no motive against, the performance of its duties*. But on the problem,—how to obtain such a board? I have already treated in detail. (See pp. 362-400.)

Tenth end.—As a condition of the *second, third, and ninth ends*, it is requisite, that a University should be able to offer some not inadequate reward for the ability and learning required in its instructors. Ability and learning should hold their value in the academy as in the world; for as Tacitus expresses it,—“*Sublatis studiorum pretiis, studia ipsa peritura.*”

It is not necessary, it is not, indeed, expedient, that the emolument of an academic place should be uniform, by whomsoever filled. For thus, one individual would obtain comparatively more, another comparatively less, than he deserves,—Thersites, in a division of the booty, would share equally with Achilles. Each instructor should, therefore, as far as possible, receive only what he equitably merits, and what he is relatively worth, his emoluments, of course, rising with his reputation, and as he may approve himself of greater value to the institution; for the evils are not less from raising mediocrity than from depressing excellence. This is the principle fairly and fully acted on in the German Universities. Heyne, the illustrious veteran, drew ten times the salary of Heyne, the promising junior, Professor; and, though in these there be not any academical monopoly, no one is appointed to the difficult and important office of public instructor who has not publicly manifested his competence to instruct. In this island all is the reverse. We pamper ignorance, and starve learning. An income permanent, and nearly determinate, is connected with each academical place; to this place, comparative merit with no certainty regulates the appointment; and the most lucrative places are, in general, those opened to the commonest qualifications. With us, Thersites obtains a far larger share of the booty than Achilles.

The English Universities are called the wealthiest in Europe;

and so they are,—but not as educational establishments. No other Universities possess such mighty means; but in none are the means so unprofitably expended,—expended, in fact, seldom in favour of learning and education, but frequently, nay generally, in counteraction. Of this deficiency Lord Bacon was well aware. For though, in his time, the *University* still educated, its chairs, or public readerships, were most inadequately remunerated; so that the world and the professions abstracted, then as now, the talent which found no appropriate recompense in either “seat of learning.” Bacon has thrice solemnly addressed the Crown, and the Nation, on this want;—in *The Advancement of Learning*, in the *De Augmentis Scientiarum*, and in the *Advice about the Charterhouse*. These testimonies are substantially the same; and in the following extract (beside emending the quotations,) I have inserted from the second and third, what is not contained in the first, and somewhat condensed the whole.

“And because founders of Colleges do plant, and founders of Lectures do water, it followeth well in order, to speak of the defect which is in *public Lectures*. Namely, in the *smallness and meanness of the salary* which in most places (*especially among us*,) is assigned unto them, whether they be lectures of [the liberal] Arts, or of Professions. It hath been my ancient opinion and observation, that in the Universities of this realm, which I take to be of the *best endowed Universities of Europe*, there is *nothing, more wanting* towards the flourishing state of learning, than the honourable and plentiful salaries of such readers. For it is necessary to the progression of sciences that Readers be chosen of the most able and sufficient men; as those which are ordained for the generating, and propagating for ever, of sciences, and not for transitory use. This cannot be, except their condition and endowment be such as may content the ablest man to appropriate his whole labour, and continue his whole age in that function; and therefore must have a proportion answerable to that competency of advancement, which may be expected from the practice of a profession. So as, if you will have sciences flourish, you must observe David’s military law, which was,—‘That those which tarried with the baggage should have equal part with those which went down into the battle,’ else will the baggage be ill attended. So, Readers in sciences are, indeed, the guardians of the stores and provisions of science, whence men in active courses are furnished, and therefore ought to have equal entertainment with them. For surely, Readers in the chair are as parents in the sciences, and deserve to enjoy a condition not inferior to their children that embrace the practical part; else no man will sit longer in the chair than till he can walk to a better preferment; and *if the fathers in sciences be of the weakest sort, or, through the meanness of their entertainment, be but men of superficial learning*, it will come to pass as Virgil saith,—

‘*Invalideque patrum referent jejunia gnati.*’”

(Works, by Montagu, ii. 94; viii. 80; v. 380.)

Eleventh end.—

“ Quæ sedes erit Emeritis ? quæ rura dabuntur
Quæ noster Veteranus aret ? ”

It is evident, and therefore requires no argument, that, no less to secure the instruction and example of distinguished teachers, (the *second* and *third* ends,) than in justice to these teachers themselves ; the academical Emeritus should be enabled to retire, when no longer competent to discharge his function, either adequately to the advantage of others, or suitably to his own strength.

Twelfth end, and last.—A University should, if possible, afford to its alumni the means of living academically together ; for thus can the possibility of social study most effectually be realised. (See p. 779.) But this can seldom be, even partially, attempted : and indeed, if certain conditions (besides the mere adequacy of accommodation to demand) be not fulfilled, the evil of such an arrangement may greatly outweigh the good. These conditions, to speak only of the more essential, are *three*.—In the *first* place, the enforcement of this regulation should not operate as an exclusion, or even as a tax. The students should be enabled to live as cheaply (and this without degradation), in the privileged Houses of a University, as they otherwise could in private lodgings ; and this supposes that the rates in all these Houses should be equitably regulated, and certain of them, at least, accommodated to the means of the poorer alumni.—In the *second* place, if the University be not limited to a single religious sect, those dissenting from it should be able to select a House, in which their attendance on domestic worship shall not be felt as a violation of their religious principles.—In the *third* place, an effectual superintendence should be maintained in the several Houses ; every member should be himself constrained to propriety of conduct, and secured against any disturbance of his studious tranquillity by others. If this be not accomplished, Colleges and Halls become, in fact, academical nuisances,—they are not aids but impediments of study.—This concludes our second head of consideration.

iii.) *Comparison of the Means, now at work, especially in Oxford, and the Ends there actually effected, with the Ends which a University, as a school of liberal study, ought to accomplish.*

In reference to the *first end* (p. 765)—that a University, in its fundamental faculty, and as the organ of a liberal education,

should make a selection of the studies, not only good in themselves, but useful as the prerequisite of others;—this primary condition Oxford in part fulfils, in part does not now attempt.

In the *first* place, as to the objects of the liberal and preparatory study afforded by this University, there is, I think, not one undeserving of preference, not one which ought to be omitted. But,

In the *second* place, in these, though there be nothing to take away, there is not a little to restore; for the Oxford curriculum now abandons both Philosophy itself and the philosophical treatment of what it professes to teach,—an abandonment in which it is opposed to its own ancient and still statutory constitution, to the actual practice of all other universities (Cambridge alone excepted,) and to the opinion of every authority in education of the least account. Nor, indeed, can the present practice of the old English Universities, in this respect, afford the smallest countenance to the omission; for Philosophy and philosophical teaching were in them necessarily surrendered, when the education supplied by the University was transferred to those who, as a body, were wholly inadequate to Philosophy and philosophical teaching. Is this denied? The denial is refuted by the history of the usurpation; nor has the proof ever been attempted, either in Oxford or in Cambridge, either publicly or privately, that the abandonment was made for any better reason, than that the sphere of instruction behoved to be conformed to the average capacity of the collegial interest, which has latterly administered the whole necessary education of the Universities. Such a proof was impossible; and if possible, would have been suicidal,—as philosophical. Aristotle, in his *Exhortative*, observes:—"If to philosophise be right, we must philosophise to realise the right; if to philosophise be wrong, we must philosophise to manifest the wrong; *on any alternative, therefore, philosophise we must.*" ("Εἰ μὲν φιλοσοφῆτιον, φιλοσοφῆτιον· εἰ δὲ μὴ φιλοσοφῆτιον, φιλοσοφῆτιον· πάντως ἄρα φιλοσοφῆτιον.")* "Philosophy is to be studied," says Clement of Alexandria,

* The author of *Indibras* (in his *Reflections upon Reason*) curiously coincides with the Stagirite in this:—"There is nothing that can pretend to judge of Reason [Philosophy] but itself: and, therefore, they who suppose that they can say aught against it, are forced (like jewellers, who beat true diamonds to powder to cut and polish false ones,) to make use of it against itself. But in this they cheat themselves as well as others. For if what they say against Reason, be without Reason, they deserve to be neglected;

"were it even, that it may be scientifically despised;" and Averroes asserts, that "it belongs to the philosopher alone, to condemn philosophy."—Accordingly, no demonstration of the kind has, in the English Universities, ever been essayed; such, indeed, was never dreamt of; and the science of philosophy proper dropt naturally from the cycle of academical teaching, when found beyond the general competence of the academical teacher.

Yet is Philosophy (the science of science—the theory of what we *can* know and think and do, in a word,—the knowledge of ourselves,) the object of liberal education, at once of paramount importance in itself, and the requisite condition of every other liberal science. If men are really to know aught else, the human faculties, by which alone this knowledge may be realised, must be studied for themselves, in their extent and in their limitations. To know,—we must understand our instrument of knowing. "Know thyself" is, in fact, a heavenly precept, in christianity as in heathenism. And this knowledge can be compassed only by reflection,—only from within: "Ne te quæsieris extra." It tells us, at once, of our weakness and our worth; it is the discipline both of humility and of hope. (See pp. 623—635.) On the other hand, a knowledge, drawn too exclusively from without, is not only imperfect in itself, but makes its votaries fatalists, materialists, pantheists—if they dare to think; it is the dogmatism of despair. (See pp. 306—313.) "Laudabilior," says Augustin,—*"laudabilior est animus, cui nota est infirmitas propria, quam qui, ea non respecta, mœnia mundi, vias siderum, fundamenta terrarum et fastigia cœlorum, etiam cogniturus, scrutatur."** We can

and if with Reason, they disprove themselves. For they use it while they disclaim it; and with as much contradiction, as if a man should tell me that he cannot speak."

* This might stand a motto for the doctrine of the Conditioned. It is from the proem to the fourth book *De Trinitate*. The scheme of pantheistic omniscience, so prevalent among the sequacious thinkers of the day,

("Raging from Reason, and on phantasms fed,")

would have found little favour with the religious and philosophic nescience of St Austin. Evolved from "the Nothing," "the All" of this theory, at the first exorcism of a rigorous interrogation, relapses into nothing;—

"Et redit in nihilum quod fuit ante nihil."

Strauss, the Hegelian theologian, sees in Christianity only a *mythus*. Naturally: for his Hegelian "Idea," itself a myth, and confessedly finding itself in every thing, of course, finds in anything a myth; "Chimæra chimæram parit."—I have never, in fact, met with a Hegelian (and I have known several of distinguished talents, both German and British,) who could

know God only as we know ourselves. St John Chrysostom says:—"Μέγιστον μαθημάτων, τὸ γινῶναι αὐτὸν. ἑαυτὸν γὰρ τις ἰάν γινῶν, Θεὸν ἵστανται· Θεὸν δὲ οὕτως ἐξομοιωθήσεται Θεῷ." "Noverim me, noverim Te," is St Austin's prayer; St Bernard:—"Principale, ad videndum Deum, est animus rationalis intuens seipsum;" and even Averroes:—"Nosce teipsum, et cognosces creatorem tuum."

Nor is the omission of philosophy from an academical curriculum equivalent to an arrest on the philosophising activity of the student. This stupor, however deplorable in itself, might still be a minor evil; for it is better, assuredly, to be without opinions, than to have them, not only speculatively untrue, but practically corruptive. Yet, even this paralysis, I say, is not accomplished. Right or wrong, a man must philosophise, for he philosophises as he thinks; and the only effect, in the present day especially, of a University denying to its alumni the invigorating exercise of a right philosophy, is their abandonment, not only without precaution, but even prepared by debilitation, to the pernicious influence of a wrong;—"Sine vindice præda." And in what country has a philosophy ever gravitating, as theoretical towards materialism, as practical towards fatalism, been most peculiar and pervasive?

Again,—Philosophy, the thinking of thought, the recoil of mind upon itself, is the most improving of mental exercises, conducting, above all others, to evolve the highest and rarest of the intellectual powers. By this, the mind is not only trained to philosophy proper, but prepared, in general, for powerful, easy, and successful energy, in whatever department of knowledge it may more peculiarly apply itself.* But the want of this superior

answer three questions, without being driven to the confession, that he did not, as yet, fully *comprehend* the doctrine of his master, though *believing* it to be all true. Expectants,—in fact "Papists in philosophy!"—Hegel himself, not long before his death, made the following declaration:—"I am downcast about my Philosophy. For, of all my disciples, one only understands it; and he does not." (*Blätter f. liter. Unterhalt.* No. 351. Dec. 1831; *et alibi.*) The one disciple, I presume, was Gabler; but did Hegel understand himself? I am told, that Hegelianism is making way at Oxford. This may be good or it may be bad: the doctrine is good to controvert; it is bad to believe.

* *Kant and Rukenienius* were early friends and fellow-collegians at Königsberg; but the genius of each seemed then (as we learn from Wyttenebach) strongly to incline towards the studies in which the other afterwards

discipline is but too apparent in English literature, and especially in those very fields of erudition by preference cultivated in England.

For example, and be it here spoken in all praise: no study has been more anxiously encouraged, and more sedulously pursued in England, than Classical Literature; and among English scholars, two at least may, for natural talent, of a certain kind at least, be ranked among the most distinguished philologers of Europe. Yet, of English scholars as a class, both now and for generations past, the observation of Godfrey Hermann holds good:—"They read but do not think; they would be philologers, and have not learnt to philosophise."* The philosophy of a philology is shown primarily in its grammars, and its grammars for the use of schools. But in this respect, England remained, till lately, nearly two centuries behind the rest of Christendom. If there were any principle in her pædagogical practice, "*Gaudent sudoribus artes*," must have been the rule; and applied it was with a vengeance. The English schoolboy was treated like a Russian pack-horse; the load in one pannier was balanced by a counter weight of stones in the other. Educationally, England for generations crept by the heavy waggon whilst other countries were flying by the rail. His Majesty George III. sent a collection of the English classical school books to Heyne; and, among others, the Eton and West-

reigned paramount. And truly, the best progymnastic of philosophy is the theory of language; and how necessary is philosophy and the practice of speculation to any progress of account in the higher philology; Ruhnken has himself authoritatively declared in his "*Elogium Hemsterhusii*."—*Wytténbach*, Ruhnken's successor, great as a critical scholar, was hardly inferior as a philosophic critic. See, besides his own works, *passim*, his *Life* by Mahne.

* The author of "*Philosophical Arrangements*" and of "*Hermes*" may be perhaps objected. "*Exceptio probat regulam*." Mr Harris had long left the University of Oxford, "where" (in the words of his son Lord Malmesbury), "he had passed the usual number of years as a gentleman commoner of Wadham College," before he began even to read Aristotle or to inquire into the Greek philosophy; and he was led to the consideration of universal grammar by no book of the academical cycle, either then or since, but by the "*Minerva*" of Sanctius. That Mr Harris was a tardy student of philosophy, is shown, perhaps, in his want of self-reliance, in his prejudice in favour of authority—at least of ancient authority. But truth is not the property of the old or of the new; "*nondum occupata*," it frequently belongs to neither.

minster grammars, Greek and Latin, astonished, as well they might, the great scholar and educationist. All the philological monstrosities, perversions, confusions, which in the manuals of other countries had been long thrown out, stood in these embalmed. The unhappy tyro was initiated in Latin, through a Latin book; while the ten declensions, the thirteen conjugations, which had been reduced to three and two by Weller and Laneelot, still continued, among a mass of other abominations, to complicate, in this country alone, the elementary instruction of Greek. Half a century, even after the judgment of Heyne, the old routine continued. But all has now been changed—except the cause: for the same inertia of original and independent thought is equally apparent. As formerly, from want of thinking, the old sufficed; so now, from want of thinking, the new is borrowed. In fact, openly or occultly, honourably or dishonourably, the far greater part of the higher and lower philology published in this country is an importation,—especially from Germany: but so passive is the ignorance of our compilers, that they are often (though affecting, of course, opinions,) unaware even of what is best worthy of plagiarism or transplantation.

Theology—Christian theology is, as a human science, a philology and history applied by philosophy; and the comparatively ineffectual character of our British theology has, for generations, in the case of England, mainly resulted from the deficiency of its philosophical element. The want of a philosophical training in the Anglican clergy, to be regretted at all times, may soon, indeed, become lamentably apparent, were they called on to resist an invasion, now so likely, of certain foreign philosophico-theological opinions. In fact, this is the invasion, and this the want of national preparation, for which, even at the present juncture, I should be most alarmed. On the Universities, which have illegally dropt philosophy and its training from their course of discipline, will lie the responsibility of this singular and dangerous disarmature; shared, indeed, with the Church and State, which have both passively and permissively looked on.

In reference to the second end. (P. 765.)—A University, if it accomplish the purpose of its institution, is bound to supply competent and to exclude incompetent instructors. But this end, is it fulfilled by the agencies now dominant in Oxford?

To answer this question, we have only to look at the preceding Table (pp. 746–747), for there we have exhibited in contrast, not dif-

ferent Universities pursuing different studies, but the same University distributing its instruction among many private Houses; each House pursuing the same studies, but by different instructors; and at last, the comparative success of the several domestic instructions, after a four years' continuance, fairly tested and formally proclaimed by the University, through its public board of Examination. But that Table, while it does not show that instruction, even as afforded in the very highest Colleges, is of a degree and quality such as it might and should be; clearly shows, however, that the instruction afforded in the lower Houses is such, as is discreditable for the University, the Church, the State, to have been ever tolerated; were that instruction, even verbally, conformable to statute, and not, as it is, diametrically opposed both to the spirit and to the letter of academical law.

Rejecting then the Halls, comparing, on this standard, only the Colleges, deducting even of these the negatives, and judging not by years but by decades, we see that instruction in one Collego is less efficient than that in another; and this to a degree, not lurking under any fractional difference, but obtruded on observation by an integral *sinking of college below college to nearly twenty depths*.* Nay, on the same standard,

* I see in the late discussions concerning medical practice and medical statistics, that less than an *eightieth part* of the difference in success, which thus discriminates College from College, would prove far more than decisive of the comparative truth and falsehood of rival medical theories. It is admitted on all hands, that if Homœopathy cure, even under one in four, more than Allopathy, it must at once triumphantly supersede its opponent. The whole question regards the *reality* of the difference; which *here* may, *there* cannot, be disputed. But imagine!—A series of eighty Hospitals, each confessedly losing, on the average, a fourth of the patients more than its antecedent; and all fiercely defended. Defended by enstasis:—as realising, together, a single system of cure, and that the one best possible! Defended by antiparastasis:—as, at any rate, the Hospitals have a vested right to cure or kill; and [though, in fact, their monopoly of treatment had originally been usurped through breach of trust,] that it would be the climax of injustice to deprive them and their governors of the profitable privilege to physic the lieges as they chose! Yet what is this but the Oxford educational system and its defence; substituting only minds for bodies, Houses for Hospitals, and a decrement by integers instead of a decrement by fractions?—In one respect, indeed, this is soothing. It shows, however unsatisfactory be the present state of Medicine, that its theories, the most conflictive, vary by a difference less, a hundred times, than the same practice of the same theory of Education varies even in the same seminary, but in *different hands*; that nature,

we find a *similar declension* manifested between the educations afforded by the *same college*, during one decade and during another. (P. 753, sq.)

The Table likewise shows, that of the two departments which the University professes, and which the Colleges and Tutors are, *de facto*, exclusively authorised, to teach, the whole collegial Tutors (49) have only, of their body, in L. H., about *a half* (26), in D. M., about a *sixth* (8), of the First Class. Consequently, if there be any connection between superior knowledge and superior tuition, Oxford now abandons, indifferently, the work of education to competent and incompetent hands; and the mighty differences of result could not, therefore, but occur, unless competence and incompetence were throughout the Houses equally distributed,—which they fortunately are not.

Such are the facts, unparalleled out of the Old English Universities, and evinced by the statistics of the Oxford Examination itself. And, however astonishing, with a knowledge of the circumstances, all is easy of explanation. Let us only recollect two things: In the *first* place, that instruction, as the *most important*, is the *most difficult*, of arts; and in the *second*, that Oxford, in violation of oath and statute, and apparently regarding education as a matter either of no importance or of no difficulty, now leaves this function to be engrossed, at hazard, by a class of men, who, as a class, are wholly unequal to the office,—an office for which indeed they were never dreamt of even by their founders. For:—1°, the actually authorised education of Oxford (to say nothing of Cambridge) is, *de facto*, monopolised by the Collegiate Fellows;—2°, the qualifications of an individual for Fellow of a College are, usually, quite distinct from his talent, learning, or capacity of teaching;—3°, out of these incompetent Fellows, the Tutors, if not self constituted, are nominated, in general, by an

at least, is far stronger against the Doctor (whom we cannot correct), than against the Schoolmaster (whom we can.) In fact, Saul slaying his thousands, and David his ten thousands, is but a type of the inferiority of one Educational seminary—of one Oxford College to another. This, assuredly, is not consolatory; but a correction of the evil is within our power.

The Rev. Mr Sewell, Tutor of New College, and otherwise an able man, has of late gravely proposed,—to send out to the great towns of England tutorial missions, from the bodies thus so brightly illuminating Oxford; professedly, in order, that any change may be averted from the system of education which has wrought so admirably in that University, and, at the same time, to communicate the benefit of such system to the lieges at large:

incompetent Head ; while 4*, out of the low average of these incorporated Heads and Fellows, a few, by the favourable circumstances of their foundation and other accidents, rise to a variable pitch of educational proficiency. Thus unable rightly to teach even what had been specially proposed, the Oxford Tutors are of course, in general, still less able to resolve the difficulties or to guide the reading of their pupils. Questions, all but elementary, must, indeed, naturally cease ; for these would be found, commonly, useless by the one party, and not convenient by the other. "*Percontatorem fugito.*" Schleiermacher truly says, that the distance maintained by an academical teacher towards the taught, is usually in the ratio of his competence. (*Gedanken, &c., p. 66.*)

It is thus manifest, and on its own standard, that the academical education of Oxford is now conducted by those inadequate to the function, even as lowered towards their level.—So much for the second end.

In reference to the third end. (P. 766). This (the proposing to the student, more especially in his instructors, patterns of high learning and ability,)—this end is not only unfulfilled by the University of Oxford, it is even frequently reversed.

Should the student not penetrate below the surface,—not find what duties have, heretofore, been violated, in suppression of the University instruction, by the University guardians ; still, he will have painfully obtruded on his view, the example of a flagrant disregard of learning in this "chosen seat of learning." Here he will see the education of himself and other alumni handed over by the public Alma Mater to the private and fortuitous nursery of a College ; and there he may find himself consigned to the tuition of an individual, not even of undetermined qualification, but who stands perennially pilloried by the University itself, marked as of slender acquirements in knowledge, and, therefore, as incompetent to teach. He thus makes, by times, the untoward discovery, that literary merit is of very minor account, even in our most venerable seminaries ; and this, if there be aught in him worth the cultivating, ends, in a contempt of the teacher, or in a disgust at what is taught, or in a self-satisfied contentment with his own humble attainments. The only hope for him is to see through the corruption,—to place himself above the seminary,—to rely upon himself. All this is the converse of what a University ought to strive after. For it should be above its alumni ; a school, not of

vanity and sloth, but of humility and exertion; and the tyro should there be made to mete himself, not with Thersites, certainly, but, if possible, with Achilles.—(See, as previously referred to, p. 376, sq.)

In reference to the fourth end. (P. 767.)—In determining strenuous study, through the excitement of honour and emulation, this school accomplishes much less than, with its means, might easily be done; although in this respect, and compared with many other universities, Oxford is not undeserving of encomium. To this end, the effect of *domestic education* is small; that of the *University Examination*, considerable.—Of these in their order.

It is evident, without descending to the fact, that there can be little or no emulation among students, as divided among the Houses, and subdivided among the Tutors; for the conditions of emulation,—*numbers, equality, publicity*,—are all wanting. In truth, competition, in such circumstances, instead of honour, receives only derision. So much indeed is virtually confessed by Bishop Coplestone.* “The heaviness of solitary reading is relieved by the number which compose a class: this number varies from three or four to ten or twelve: *a sort of emulation* is awakened in the pupil,” &c. In the circumstances of his reply, more perhaps could not have been admitted; and, in point of fact, emulation in the collegio-tutorial discipline of Oxford may be practically thrown out of account.

The only excitement of study, through the desire of honour, worthy of account in Oxford, is that resulting from the Examination for a degree of A.B., and the classifying of candidates therewith connected. And this, in so far as it extends, is beneficial; but its influence is limited. In the *first* place, the influence does not operate in *full effect throughout the curriculum of academical study*. It acts weakly and irregularly at first, and only acquires continuity and strength as the academical course draws to a conclusion. In the *second* place, the influence does not operate *on all*. It determines no application in the many who are not to graduate. It determines also no application in those, neither few nor feeble, who are, or deem themselves, from any cause (as want of perse-

* *A Reply to the Calumnies, &c.*, p. 146.—I may notice, that what Dr Coplestone in the context, says of tutorial instruction, is rather a statement of its *possible* virtues,—which in his own tuition, I have no doubt, were realized,—than of its actual qualities, as manifested by the immense majority of the Tutors.

verance, want of nerve, the distraction of favourite pursuits, &c.,) unable to attain a higher honour, and have no ambition, perhaps a positive dread, to be commemorated for a lower. On these the classification, if it have any effect, acts only for evil; as it constrains the candidate to limit the books, which he studies and gives up, to such a minimum, as may not risk his being honoured and recorded. It is a great improvement in the new Statute, that this positive evil of the present Examination is therein obviated; for the names of all who pass are henceforth to be published, be they honoured or not.

In reference to the fifth end. (P. 768.)—This end is the eliciting in the student the fullest and most unexclusive energy of thought: 1°, by presenting to him the most suitable *objects* of study; and 2°, by teaching these through the most suitable *exercises*.—Of these in detail.

As to the *objects*:—The more arduous studies, those which, requiring, draw forth the highest and most improving activity of mind,—Philosophy proper, (the thinking of thought, the science of what can and can not be known,) and a philosophic treatment of the sciences in general;—these, as a matter of necessity, must be excluded from an education monopolised by an interest, like the collegial of Oxford, constituted, not by ability and acquirement,—and teaching, not for the benefit of the taught, but for the profit of the teacher. For an instruction, in objects, methods, means, can never possibly transcend the average level of the instructors. The honour of the University, and the advantage of its alumni, are here, therefore, now subordinated to the capacity of those, who were rarely incorporated for any capacity of academical teaching, though usurping exclusively the office; while what is the comparative height and depth of their actual capacity for that office, and on an Oxford standard, the table shows. Instead, therefore, of the studies fostered in Oxford being those which demand a higher capacity, and elicit any maximum of thought, it was requisite to prefer such as could be best reduced to an inferior level, to mechanism and routine. And though impossible for a University to exclude all philosophical authors from the academical cycle; yet philosophy was taught not as food for speculation, but in the dicta of these authors as peremptory and decisive; whilst the student's knowledge was gauged, not by his systematic comprehension of a work in its totality, parts and rela-

tions, but only by the accuracy (and that is not to be contemned) with which he might have committed to memory the very terms of its definitions, in the very language of its writer.

As to the *exercises*; their existence and utility were of course regulated by the capabilities of the exerciser.

Examination (p. 769) limited to the petty numbers of the pupils, and by the ability and knowledge of the Tutor, was too frequently, if it took place at all, a perfunctory, occasional, and useless form.

Disputation (p. 770) long obsolete, was, except as a dead formality, in Oxford totally forgotten.

Repetition (p. 773) is the exercise which has been most successfully practised in Oxford; this, indeed, the examination for a degree made necessary. Herein there is every thing to praise; and had the study been needs as intelligent as sedulous, and directed as much to understand as to remember, there would have been almost nothing left even to desire.

Written Composition. (P. 775.)—Not one of the conditions of this exercise are in Oxford collegially fulfilled,—except in small measure, and by unusual accident.—The student is not compelled to think for himself, by being limited to definite parts of a definite subject; but, if the form of a written composition be occasionally required, he is left to satisfy the demand by any production, however vaguely pertinent, and therefore, perhaps, not even his own.—There is no one bound, no one probably inclined, if, indeed, any one competent, to criticism.—Finally, there is no numerous audience to listen; and so far from any stimulus to exertion, a painstaking writer would by his fellows be only derided as a painstaking dunce.

Teaching, in order to learn. (P. 776.)—This is not now in Oxford, indeed not now in any of our present Universities, employed as an improving exercise in the course of learning. But, in Oxford, as the Tutors are generally neither old in years, nor few in numbers; therefore, if individually well selected, and their tuition such as to necessitate an all-sided instruction of themselves, the tutorial system might justly claim, as a reflex mean of erudition, some peculiar advantages. But, alas! a Tutor's appointment and teaching are so much mere matters of routine, that little or no profit can accrue to himself from the exercise of his function. Instruction has been too long and too generally, in Oxford, as elsewhere, the "*sifflement des Perroquets*;" nor, unless the doctrine

of Aristotle in regard to teaching and knowledge (p. 765) be egregiously wrong, can the modern discipline of that University make (as a system) pretension to respect, or even toleration?

Conversation with, interrogation of, the learned, (p. 778,) is an exercise to be at once discounted; for no one will hold, that an Oxford Fellow-Tutor is now, *ex officio*, to be presumed, either wise himself, or a fountain of wisdom to inquiring pupils.*

Social Study (p. 779) is an exercise which, as it can be best realized in the community of an academical House, affords an advantage more than compensating for certain disadvantages which frequently result from such an arrangement. In this view, therefore, I think, that the Colleges are, and that the Halls might be, profitable institutions;—but the best as now existing, are capable of great improvement.

In reference to the sixth end (p. 780),—the grant of a Degree or authentic certificate of proficiency. To say nothing of their personal and professional character, and judging only from the mode of their appointment, and the sacred obligation under which they must ever consciously act; I should confidently rely on the moral rectitude of the Oxford Examiners. This, indeed, I have never heard called in question, either as regards the Oxford or the Cambridge Masters; and, in this fundamental condition of the value of a degree and relative classification, these Universities stand in honourable contrast to most others.—As to the competence of the Examiners, in reference to the objects of examination, the same is true. But these objects, like the objects of instruction, I must hold to be inadequate, in as much as they do not comprise Philosophy and sundry of the philosophical sciences. (See p. 786, sq.)—In another respect, I think that a far more definite line should have been drawn between the higher honours, which in the *new* Examination Statute are attached to the departments necessary for a degree, and the lower, there assigned to branches of study left optional to the candidate. For a class of

* The following note should have been appended to the quotation (p. 779) from the Caroline Statutes:—This regulation, as to a questioning of the Professor, is an inheritance devolving from the middle ages—the mere repetition of an ancient statute. It is found, almost in the same words, as a law, in the Italian and Spanish Universities, and throughout the Colleges in every Catholic country belonging to the Society of Jesus. In like manner, the German Protestant Universities, in general, secure, by public authority, this privilege of interrogating the academical instructor;—I remember the fact, in reference to Goettingen, Erlangen, Greifswalde, Marburg. &c.

honour in any one department is ostensibly the same as a class of honour in any other.—Nor can I think, that more might not be done to evince the comparative proficiency of individuals. For though no one should reach a third, second, or first class, without a definite amount of learning; still the several candidates within that class might be easily subordinated by comparative merit, and not left to the tumultuary grouping of an alphabetical arrangement.—But of this again.

In reference to the seventh end, (p. 780),—the public Exhibitions necessary for the study of the Physical sciences. On the present state of Oxford in this respect I am hardly qualified to speak. As to the mode of instruction in these sciences, I shall have occasion to say somewhat in the sequel.

In reference to the eighth end, (p. 782),—the supply of the students with a complement of Books suited to their scientific wants,—Oxford, publicly or privately, has done nothing. The libraries of the several colleges are, I believe, (like the Bodleian and Radcliffe,) still closed against the undergraduate; nor indeed have the Houses, in general, such selections of books as would be rightly useful to him in the guidance and promotion of his studies.

In reference to the ninth end, (p. 783),—a responsible and competent board of Regulation and Patronage,—Oxford has none. The need of it is shown by centuries of illegality and abasement.

In reference to the tenth end, (p. 783),—the adequate Remuneration of the university Teachers;—as university teaching is now virtually extinct in Oxford, there can be no question about its adequate remuneration. Indeed, the conjoined facts,—the ancient deficiency of this recompense,—its independence on the exertion of the incumbent, and his consequent tendency to do nothing,—the vicious modes of nominating professors, the nomination, therefore, of incompetent prælectors,—the disinclination of the new rulers of the University, the Heads of Houses, to do ought to raise the public instruction, which they were sworn to improve,—in fine, even their active co-operation towards its actual extinction; these conjoined facts soon had their natural—their necessary result. The public or academical education was nullified, if not formally annulled; the private or domestic silently succeeded to its place; and the Fellow who rarely obtained his appointment in College from literary merit, superseded the Professor, who ought in the University, to have been elected to his

chair for that alone,—but who, at last, had become so contemptible, that, except when an endowment could be converted into a sinecure, was, without reclamation, not even nominally elected at all. Most of the public prælectorships or academical chairs, thus have, and have long had, an existence only in the Statute-book. (See pp. 437–441, 460–462.)

In reference to the eleventh end, (p. 785,)—a Provision for academical Emeriti,—with this, it is almost needless to say, that Oxford is wholly unprovided.

In regard to the twelfth and last end, (p. 785,)—the accommodation of the academical members in Academical Houses (Halls or Colleges,)—Oxford supplies this, but not under all the three conditions to their full extent. The first is not adequately fulfilled. The second does not at present emerge. The third is fairly performed.

I have, in these previous observations, been compelled—compelled in the interest of truth—to show, in various respects, that the education now afforded in the University of Oxford, is not such as it ought to be. But though no attentive reader can suppose, from my strictures upon this, that I am, by preference, an admirer of any other British University; still I think it proper explicitly to state,—that I regard our British Universities, as, *though in different ways, all lamentably imperfect*; and while none, in my opinion, accomplishes what, under right regulation it might, I should yet be mortified to have it thought, that I could institute a comparison where there is no medium, far less disparage one inadequate instrument to the praise of any other. Oxford is here only collated with Oxford; and for aught that I have said, however imperfect may be the education of that University as tested by its own standard, I might still, without at least self-contradiction, hold that the discipline of Oxford constitutes, in so far as it goes, the very best academical discipline in the British empire. In point of fact, with the present unfortunate organisations of professorial appointment, I hardly think that the Professors of the British Universities would, as a body, show a higher average than the Oxford Tutors, if we had their relative capacity meted by a standard like the Oxford Examination. They are, *pro tanto*, in general, unknown quantities.

I now proceed to the last head of distribution.

iv.) *Suggestion of such Changes as may most easily be made, to render the University of Oxford a more efficient instrument for the purpose of general and preparatory education.*

As already premised, I do not mean to hazard the suggestion of measures which would here realise any ideal of a perfect University. I propose only easy and manifest remedies for evils intolerable even to ordinary reason. It is self-evident, that if Fellowships, Headships, &c., were made the just rewards of academical merit, these offices, themselves enhanced indefinitely in estimation, would constitute an apparatus of powerful agencies, which, as they have hitherto impeded, would now be turned to promote, the ends of the University; and Oxford, raised from her present humble and ambiguous condition, would henceforward stand proudly forth as the most efficient mean, perhaps, of education in the world. But this, however I may wish, I would not venture to propose.

A University only exists, as it executes the functions of its existence; education is the one sole function for which it was created: as an organ of education, the University of Oxford (and what is true of Oxford is true of Cambridge) has been long suspended; its existence, therefore, is in abeyance. The statutory education being suppressed in the public University, a precarious education has been attempted in the four-and-twenty private but privileged Houses; while these, unconnected with the University and with each other as seminaries of instruction, are merely a local aggregation of so many private and irresponsible schools, their only academical correlation being, that they all send up their pupils, as candidates for a degree, to be examined by the central board appointed by the University. This public examination, as we have seen, shows, of itself, that these twenty-four Houses are, in general, most inefficient private schools; one sinking below another to such a depth, that the lowest of the twenty-four is almost twenty-four times lower than the highest.

The Houses and their Heads have contrived, however, to swamp the University. Have they elevated themselves? But in restoring the public reality of education against the private and usurping semblance—in restoring the University against the Colleges; we ought not to imitate the precedent of the Houses, we ought not to swamp them. Our policy should, in fact, be directly the converse. Let "Reform," not "Rescind," be the word.

Restoring the University, we should not supersede the Colleges ; but, on the contrary, enable the best to do far more than they can now accomplish, and compel the worst to become the rivals of the best. Let our reform be that of Bacon,—without bravery, or scandal, or assentation, either of old or new ; and taking counsel of every time, if our changes be rational, let us not be startled should they be compulsory. They ought, however, to be gradual ; beneficial to the public, but not unjust to individuals : announced, long enough before they are carried into execution ; and no duty suddenly required of any to which he is not bound to be competent. Our procedure should be the same in our seminaries of either kind ; in both we should prefer ingrafting to extirpation,—were it only for parcimony of time. For thus, as, in our gardens, the idlest stock may by a prudent treatment soon rise into a fruitful tree ; so, in our Universities, the least effective College may by a judicious introduction of new measures spring at once to unexpected usefulness and honour :

—“ Nec longum tempus, et ingens
Exiit ad cœlum ramis felicibus arbor,
Miraturque novas frondes et non sua poma.”

In the ensuing observations, I shall consider :—a) Things primary or constitutive ; b) Things secondary or complemental.

a.) *Things primary or constitutive.* Under this head the discussion divides itself into *five* parts, in as much as it regards :—1. The *Objects* of instruction ; 2. The *Instructors* or kind of persons privileged to teach ; 3. The *Instruction* and its modes ; 4. The *Excitement* to study ; 5. The *Degree* or certificate of proficiency.

1. *The OBJECTS of instruction.* (Pp. 765 and 785 sq. ; 768, sq. and 794 sq.)

From what has been previously said it is apparent, that, in my opinion, there is much good, and not a little deficient, in the object-matter of the Oxford education.

In the *first* place, I hold, that the study, there pursued, of philology, and in general of classical antiquity, is of the highest utility ; both (objectively) as supplying the prerequisites of ulterior knowledge, and (subjectively) as a discipline of mind. In relation to the former, I have above, (pp. 342–354,) endeavoured to show, that classical studies are of the utmost importance to the liberal professions, more especially to Theology ; and in reference to the latter, I would only object, that, as too mechanically taught, in

Oxford, these studies do not become the mean of sufficiently awakening the learner to a vigorous self activity. In a word, the philological teaching is there not philosophical enough. Even the higher grammar, a science most important in itself, and comprising problems of the most interesting and profitable discussion, is, educationally at least, wholly neglected; the philology, the object, of tuition in the Collego, and of examination in the schools, rarely rising above an empirical knowledge of the phraseology of this or that classical author.

But in the *second* place, this omission of philosophical grammar from the cycle of university studies, is only part and parcel of the omission of philosophy itself along with the more central of the philosophical sciences. On this unhappy omission, academically unexampled out of England, in violation even of English academical statute, and contrary to all opinions,—universally the most respectable, and specially the most respected in Oxford, I have already spoken, and may hereafter have occasion to speak. As noticed, Philosophy, in Oxford, as in Cambridge, was only left untaught, when the ordinary instructor had become incapable of teaching it. The raising of the teacher in these schools is, therefore, a prerequisite to the restoration of philosophy. And of that, anon.

2. *The INSTRUCTORS, or persons privileged to teach.* (Pp. 765 and 790 sq.; 766 and 793.)

Speaking only of the fundamental faculty,—there are two kinds of Instructors to whom Universities confide the performance of their essential duty—the business of education. These we may call *Professors* and *Tutors*; although the distinction in function may not, especially in former ages, and in foreign countries, correspond always to the distinction in name. By *Professor*, I mean a teacher, exclusively privileged, to deliver from his own resources and at his own discretion, a course of lectures, on a certain department of knowledge, to the whole academical alumni. By *Tutor*, I mean a teacher, among others, privileged to see that his peculiar pupils (a section of the academical alumni) read and understand certain books—certain texts, codes, departments of doctrine, authorized by the University. Tutors are now, *de facto* at least, the only necessary instructors in Oxford and Cambridge; Professors alone are known in the other British, as in all foreign, Universities.

Instruction by Tutors, and instruction by Professors, have, seven-

rally, peculiar advantages; there are certain conditions which each system specially supposes; and this or that Tutorial, this or that Professorial, application will be good or bad, as the conditions of the special system are or are not fulfilled in it. Comparing these together in themselves, that is, all else being supposed equal:—

The peculiar advantage of the Professorial instruction is,—that requiring a small complement of teachers, these may individually all be of a higher learning and ability; and consequently in so far as higher individual learning and ability afford a superior instruction, the Professorial system, if properly organized, is preferable to the Tutorial, even at the best.—But in so far as the efficiency of an education depends on the greater number of its teachers; or, in so far as the condition of higher learning and ability is not adequately supplied, the Professorial system is inferior to the Tutorial, as the Tutorial ought to be.—But as each, if properly organized and applied, has thus its several utilities; we shall find, that as practically realized in this kingdom, the conditions of neither have been fulfilled.

Professorial System.—The fundamental condition of this scheme is the *superior qualification,—learning, ability, and didactic skill,—of the Professor.* But how greatly this condition has been neglected, is shewn in the wretched modes of academical appointment prevalent in this country. (See pp. 385—400.)

Tutorial System.—There are *three* conditions of the efficiency of this scheme: 1°, *The application of the Tutorial numbers;* 2°, *The competency of the individual Tutors;* 3°, *The sufficiency of the academically authorised books.*

As to the *first* condition, and looking merely to Oxford, no attempt has been made to draw the Tutors from their isolation in the private houses, and to employ them, *in larger or smaller pluralities, in exercising the academical alumni, collected into University or public classes.* And yet, the greatest and most distinctive mean of Tutorial efficiency has thus, in the English Universities, remained unapplied. With a staff of very incompetent Tutors, this measure could not, indeed, be accomplished. It could not even be attempted. But the necessity of its appliance would forthwith determine an elevation of Tutorial qualification. Those who had deemed themselves, and had been deemed by others, not incompetent for the function, so long as tuition lurked a torpid routine in the privacy of a college, would no longer appear even

tolerable, so soon as their inferiority was brought into public, and into public comparison with the superiority of others. A beneficial competition would thus be determined between the instructors; all would endeavour to excel, and none be content to remain very far inferior. The necessity of taking measures for the better appointment of Tutors would soon follow, if this improvement had not indeed preceded; and the students (besides the other benefits of such a class) would thus enjoy the *triple* advantage,—of being variously exercised by a competent number of competent instructors,—of hearing the same object considered by different intellects in different views,—and of having placed before them the highest academical examples of erudition and ability. But such an organisation of public classes under appointed Tutors, for the daily exercise of the students in general in their common studies,—this, as I said, has never been attempted in either of the only two Universities in which the Tutorial system has prevailed; and yet this application is the very mean through which that system can realise its chief advantages. For a *plurality* of Tutors can do what can be done by no individual Professor.

As to the *second* condition,—the *competency of the several Tutors*,—this has not only not been fulfilled; but on the contrary, (as repeatedly observed,) the Tutorial office has been abandoned by the University to the private incorporations, the members of which are, in general, neither Collegial Heads nor Collegial Fellows, from any literary merit. It is certainly true, that the University is not so totally dependent on individual competence in the teacher, where the Tutorial system prevails, as where the Professorial. Still, however, it is dependent, in a great degree; and the memorable and melancholy consequences of the neglect, in Oxford, of the Tutors' competency are more than sufficient to manifest the clamant urgency for a prompt and fundamental reformation of the abuse. (See pp. 744, sq.) One prospective measure, corrective at least of the evil in the mass, presents itself obtrusively. By statute, the condition of becoming Tutor is not a *Fellowship* but a *Degree*. (P. 411, &c.) The monopoly of privileged Tutorial, that is, now of academical, instruction by the members of the private incorporations, is an illegal usurpation. I would, therefore, suggest, that no one should, henceforth, be eligible for this office, (which by the proceedings of the Heads of Houses themselves, has long been privileged and public,)

who has not taken *Primary Highest Honours*; and that he should only be competent to act, at least as *University Tutor*, in that department wherein he shall have so graduated. I am, of course, aware, that some first class men may turn out comparatively poor instructors; and that some laudable instructors may stand comparatively low in the Examination. But still, these are the exceptions. And although it might be proper to have a mean of conferring Tutorial eligibility for special reasons, still it cannot but be advantageous, to lay down a highest academical honour as the general condition of becoming Tutor. This would at once abolish the present unparalleled system of abuse; which, comparing the educational establishments of Oxford only with themselves, allows one House to sink below another to some ten or twenty depths.—But as it is of consequence, that the several Tutors should be connected with individual Houses, it being of importance that College should rival College for the honours of the University; and as there is, at present, no other authority to which this patronage could be safely confided: I am not prepared to say, that the appointment of Tutor should be withdrawn from the Collegial Head.—At the same time, in the smaller Colleges, it might be advantageous, if two at least combined, and had in common a single complement of Tutors.—Could not government be induced, to make a laudable exception of its arbitrary patronage, so that the Tutor, (always generally in orders,) who is not a Fellow, might, after a meritorious period of instruction, claim a benefice in the Church? Equitably, a higher proportion of the fee, which the student ought now to pay for his superior education, should be allowed to those Tutors who do not enjoy the benefit of a Fellowship and its results.

The *third* condition of the Tutorial system is, *the sufficiency of the academically authorised books*.—This condition, *if adequately fulfilled*, gives, in my opinion, a decided advantage to the Tutorial over the Professorial scheme of education,—at least as the latter is now constituted in this kingdom; (and if combined with the second condition, even over the Professorial in its most perfect organisation abroad.) For—

In the *first* place, as existing among ourselves, the Professor is not improbably *unequal to his office*; no method of academical patronage prevalent in Britain being good,—one, in fact, is only more vicious than another. The standard of academical competence is, consequently, low; and the Professor too often, even on

that low standard, an inadequate instructor. But on this matter I need not at present enter, having already treated of it in detail. (See pp. 362-400.)

In the *second* place, the doctrine of a Professor is at best only the opinion of an *individual*.—If appointed by an incompetent, an irresponsible, a partial authority, he is probably of merely ordinary talents, or of merely ordinary information; in either case, therefore, his opinions, on the subject which he has an academical monopoly to teach, are not worth the knowing.—If the Professor be a man of talent, his ingenuity may easily mislead both himself and others; and, exempt from criticism, he may continue to propagate for decades, with the authority of a privileged teacher and the contagion of admiring pupils, doctrines not only theoretically false, but practically dangerous; doctrines which, if published to the world, are lightly analysed into a tissue of sophistry and half knowledge. It may indeed be, that a Professorial course is trustworthy and instructive, supplying a want in the patent literature of the subject; or affording a useful introduction to its study. But this is rare. How few academical courses have been thought worthy of the press, even by self-love or the partiality of friendship; and of those which have actually been published, how few have the public thought worthy of perusal! But for the chance of such a possibility, I hardly think, that a great University, like Oxford, (which has at its disposal a large and costly staff of Tutors, and, therefore, is not, like poorer Universities, dependent on Professors,) would be wise, in preferring the dangerous probabilities of our present Professorial system, or even the favourable contingencies of any better which it is ever likely to compass. It would, in my humble opinion, be far safer to elevate its actual education by Tutors; than, subverting that, to return to its old education by Professors, (still statutory though this be,) even with the best prospects of improvement.*

* I have latterly, in some subordinate points, modified my opinion on the Professorial and Tutorial systems, in reference to Oxford, and in reference to each other;—and this principally from *three* considerations.

In the *first* place, I was formerly inclined to professorial, as the chief academical instruction, not certainly on its own account, (for I always held, that what is good in a lecture would be better in a book); but because I saw therein the only mean of collecting the students in large classes: regarding a large class as the necessary condition of exercise; and deeming exercise, if not the sole, as the paramount, function of a University in its general education. I had even, in theory, imagined a plurality of Professors on the same subject,

In the *third* place, there are in all or most of the departments of knowledge which a University, in its fundamental faculty, ought by preference to teach, certain essential parts, certain primary or preparatory truths, certain books even, which it is of the utmost consequence, that a student should, above all and before all, be made familiar with.* But these, for the very reason that

in order to reduce the class of auditors to the possibility of being exercised; thinking, perhaps, too much of the utility of professorial competition and the example of ancient Padua, too little of the countervailing evils and the example of Universities in general. But though this plan has been also advocated by my learned friend, Mr Bonamy Price, in his late ingenious "Suggestions for the extension of Professorial teaching in the University of Oxford," I cannot now maintain it. It had not formerly occurred to me, that this exercise might be effected, and better effected, by other means than the Professor. Of this I am now persuaded. For, were the Tutors merely raised to their proper level as instructors, as without difficulty could be done, they might then easily be drawn from the College, and each, like a Professor, applied as an individual in the exercise of University classes. Nay, as the proper execution of this office requires numbers, the Tutors, in their plurality, could discharge it *better* than is possible by all the exertions of any single exerciser—of any Professor.

In the *second* place, a maturer reflection has convinced me,—that while the Tutors ought not to be abolished but improved; their subjection, as subordinates to the personal and arbitrary instruction of a Professor, would, by men of standing and intelligence, be felt as degrading, even were the Professor raised to what he ought to be, and as simply intolerable, were the Professor to remain at the present British level, that is, be no better than themselves.

In the *third* place, if the Professorial system, for the non-physical—the non-exhibitory studies, were again restored, and still more if a plurality of Professors lectured on the same science, there could either no longer be any unity in the examination for a degree, or the subjects of examination must be divorced from the teaching of the academical instructor.

To these three considerations there may be added a *fourth* :—the improbability, that even if the Professorial system were re-established, it would be established on a proper footing, that is, on a footing such as is not yet realised in any University of this kingdom, and to the realisation of which within herself, Oxford would make undoubtedly a strenuous resistance. But such was the hypothesis.

* In truth, all the older (as indeed some of the later) Professorial "prælections," were only explanatory of books; and the various departments of the Faculty of Arts, throughout the Universities of Europe, owe their constitution, in fact, to Aristotle, whose different works (either in his plain text, or in this text and a commentary, or in an abstract from this text,) were what the "Reader" attempted,—were, indeed, what alone he was permitted, to expound. The older Professors were therefore intermediate between our present Professors and our present Tutors. In Louvain, for example,

they are certain, while they at once supersede his speculations and occupy his course; are apt to be omitted, or slurred over, or given, without reference to their author, even by a Professor not ignorant of their relations and importance. The advantage of the taught is thus, too often, sacrificed to the glory of the teacher; the unhappy learner being inflated by the syllabus of novel paradox, not nourished by the bread of ancient truth. The reverse of this a University ought to ensure. And in the documents which an alumnus *ought* by preference to study, there is more than sufficient to exhaust the curriculum of Arts. A series of such documents therefore the University of Oxford, having adopted the plan of Tutorial instruction, is even bound to provide and privilege; as the materials of private study by the pupils,—of explanation by the Tutors in the Colleges,—and of exercise by the Tutors in the “schools.”

But coming to the great question—*Is this condition by Oxford adequately fulfilled?*—To this we must, without qualification, emphatically answer—*No*. Indeed every, the remotest requisite towards this fulfilment remains still unsupplied. There has in Oxford been no attempt even to organize an intelligent board by whom such designation, selection and collection might be carefully, and continually made. The business of such a board of studies is neither easy nor temporary. The right performance of its duties supposes great learning and great judgment; and its decisions of one year, it should be ready to revise and even to reverse, the next. It ought to be actuated by no motive but the scientific interest of the student; and, of course, in its choice of works for academical reading, it would regard as foolish any limitation by country or by school. But such a selection is not more difficult than necessary. A University which employs a tutorial or semi-tutorial system is bound to have its own series of approved books, for its own cycle of approved studies; and among the “academical courses” which have, in consequence, been collected and composed, we possess some of the most valuable contributions which have

(p. 737, sq.), the Professors of the *Pædagogia* bore, perhaps, even more analogy to College Tutors than to University Professors. The older academical instructors thus, in fact, united what more recently have been severed. Nor was the union useless; for beside combining the advantages of the two systems of teaching, professorial and tutorial, it comprised others of far higher consequence, in an unexclusive employment of all the means of exercise and excitation.

ever been made to learning and philosophy. But in this respect, Oxford has done absolutely nothing,—beyond (to say nothing of religion) some indication of the vaguest in its Examination Statutes touching the age and character of the classical works to which the candidate is limited. As once and again repeated, the central—the peculiarly academic province of speculative philosophy or philosophy proper is, in modern Oxford as in modern Cambridge, ignored. And in both, as has been also noticed, for the same reason—the average inability of the Tutors. The easier parts of Aristotle's system were indeed still retained; but these might, in the circumstances, have been as well omitted; because, read as fragments, and by minds undisciplined to abstraction, they could neither be understood themselves, nor stimulate the intellect to understand aught else. There was no gradation from the easy to the difficult, from the new to the old. Philosophy was taught, philosophy was learned more by rote than by reason; and an abrupt intrusion of the tyro thinker into the Ethics or Politics of the Stagirite might discourage or disgust even a potential Montesquieu. Logic alone was studied in a modern summary. But here too the unphilosophical character of the Oxford philosophical discipline is apparent. That University, having formerly adopted, still adheres to the *Compendium* of Aldrich, not because Aldrich was a learned dialectician, but an academical dignitary; and the book, not overvalued by its able author, after leading and misleading Oxford logicians, during former generations, at last affords a more appropriate text for their corrections during the present.* But should Alma Mater thus lag behind her alumni?

3. *The INSTRUCTION and its modes.*—(Pp. 769, sq., and 795, sq.)

The mode of instruction is varied by the various character of its objects. The knowledge which depends on the ocular demonstration of costly collections and experiments;—this knowledge, easy and palpable, requiring an appliance more of the senses than of the understanding, can be fully taught to all, at once, by one competent demonstrator. The teaching of the natural or physical sciences ought, therefore, as I have already observed, to be *Professorial*. On the contrary, the sciences which result less from perception than from thought, and which principally require, that

* See Mr Mansel's Notes on the Rudimenta of Aldrich. Of these, without disparagement to the Dean, it may be said,—“La sauce vaut mieux que le poisson.”

the understanding of the learner should be itself vigorously applied; these sciences, having no external exhibition, are not astricted to individual teaching, and if many can more effectually rouse the mind of the learner to elaborative exertion than one, will best be taught by a well organised plurality of teachers,—in other words, through a good Tutorial system. This good *Tutorial System*, which supposes always a competency in the individual, is a combination of the private instruction *by Tutors in the College*, and of the public discipline *by these Tutors in the University*.

The most important academical sciences,—the cognitions, best in themselves, best as preparative for others, and best cultivating the mind of the student, are all of this latter kind. I would, therefore, prefer for them, perhaps absolutely, and certainly under the circumstances of Oxford, the improved Tutorial system. This supposes *two* conditions. It supposes—

1°, *Collegial instruction by a Tutor,—collegio-tutorial classes.*—The student having by himself attentively perused, and, as far as possible, mastered a certain portion of a certain book, goes up along with his class-fellows of the same College to the Tutor's lecture. Here the pupil reads, repeats, and is examined; his mistakes are corrected, his deficiencies supplied, and his difficulties solved. The Tutor, now never an inferior graduate, has his zeal and emulation stimulated towards an ever higher instruction of his pupils; conscious, that from day to day they are to be publicly tried, publicly collated, and that his own character and competence will, though indirectly, assuredly be meted by theirs. The pupils, on their part, are actuated still more strongly by the like feelings; for their honour is directly interested in going down, as well as possibly prepared, into the important and public contest of the University class. Thus it is, that new life and strength would, under the improved system, be inspired into the collegial tuition; and it might then be said of the Colleges of Oxford, no less truly than of the Colleges of Louvain (p. 740), "here no labour is spared, either by the Tutors in teaching, or by the Pupils in learning." This further supposes—

2°, *University discipline by Tutors,—academico-tutorial classes.*—The students who, in the several Houses, and under their several Tutors, have been prepared in the same book, now meet for further examination, &c. by Tutors, their own and others', in a public or University class. But as the number of such students might be so great (trouching perhaps on four hundred,) that they would, if congre-

gated into a single class, baffle exercise; and as, at the same time, it is of vital importance for the sake of competition, that the classes should not be made too small, it might hit the mean, so to divide them, that a hundred and fifty being the maximum, the correlative University classes might probably be three.

In these classes, (which might meet for an hour on five, or for an hour and a-half on four days of the week,) the students should be exercised in examination, oral and written, in compositions to be strictly criticised and read, &c.; and so called up, (as by the lottery of an alphabet,) that it shall be impossible to anticipate the occurrence. These classes to be each conducted by at least three Tutors; who may either remain in one, or circulate, more or less rapidly, through all. It might be better, probably, to have the Tutors specially appointed to the *University* classes, though the appointment ought only to be temporary; and a certain emolument should, likewise, be attached to this function. The office of University Tutor would thus be rendered at once of higher honour and of greater responsibility. In a class one Tutor should act as Præses; but on what principle this pre-eminence should be regulated, is a matter indeterminate and of minor importance. No Tutor should examine, &c. his own collegial pupils, — Tutor and pupil should, in fact, be separated in all relative to academical honours. In an exercise of the students the plurality of the Tutors affords great advantages over the individuality of a Professor; and in such exercising is comprised the most, and the most peculiar, of the benefits which academical instruction affords. For Tutors being once competent to the work, may be indefinitely multiplied according to its exigencies; whereas a Professor, if he do not, as he generally does, altogether neglect the labour, yet limits and must limit it, to the narrow sphere of his individual capabilities.

The exercise of the student in the University classes, should be partly exigible, partly ultroneous. The former would simply qualify for a degree, through a mere certificate of attendance; whereas the latter would afford the mean towards distinction and class honours.

Attendance on all the University classes should not be requisite for graduation, but only on a certain number. Some classes may be too elementary for some students; and, on the contrary, some students, though not undeserving of a degree, may want the scholarship or capacity necessary for some classes.—Attendance

to be secured and ascertained, by a catalogue called daily, or at irregular intervals.—Certain classes to vary annually their books.

The University classes, in general, ought to commence and finish with the academical year,—that is, in the terms of Michaelmas and Trinity; and attendance during three of these years should be required for a degree. This would, of course, necessitate a modification of the irregular entrance and the irregular attendance, still tolerated in the English Universities. The vacations might perhaps remain unchanged; for these cessations in the University classes could be usefully employed as seasons of domestic repetition or revisal. (See p. 774, note.) But on this and other matters of detail, I avoid speaking.*

* There is another, though a minor, and merely collegial, abuse, which could not survive the congregation of the academical youth for serious study in unexclusive classes;—I mean the foolish distinction of what (to say nothing of another, that of "Nobleman,") is usually called "*Gentleman or Fellow Commoner*;" and which, though too contemptible for notice in the text, may be dispatched in a foot-note. To those ignorant of the English collegial system, be it known then, that for payment of an extra rate of Tutor's fees, room rent, &c., an intrant is admitted into certain Houses, under the above designation,—dines at a different table from the other undergraduates,—walks about in a peculiar garb,—and is specially privileged to neglect the ordinary discipline, the ordinary necessity of study. "The Gentlemen Commoners" are, I find in Oxford, now in number nearly a hundred; constituting a sixteenth part of the whole undergraduates. They are admitted by a majority of the Halls,—by a minority of the Colleges.

In every point of view, the distinction, name and thing, is, apart from the ineradicable return to certain parties, utterly absurd.

It is *grammatically* absurd. The word "*Gentleman*" properly means—"man of family;" but the collegial distinction can now be purchased by any; and is, indeed, peculiarly affected by those who have no other pretension, but this same purchase, to the inverse appellation.—It is *historically* absurd. For though of old, birth and wealth might, here as elsewhere, hold some mutual proportion; in this country, at least, they now hold and have long held, none.—It is *statistically* absurd. For whilst in aristocratic Germany, where blood is legally discriminated and privileged, a Prince even of the Empire frequents his father's University in the plain guise of an ordinary "bursch;" in democratic England, where blood is not discriminated, far less privileged, by law, and in the richest, oldest and most venerable of our national Universities, each aspiring Snobson publicly ventilates his private purchase of an ironical gentility in silk and velvet. Here, we see, in one College, a far descended nobleman, assiduous in study as a simple Commoner; and there, in another, the issue of a topping tradesman, the scion,

4. *The EXCITEMENT to Study.* (Pp. 766, sq., and 794, sq.)

Emulation is the one motive to diligence which the student may

perhaps, of his lordship's tailor, idly rustling it as "Le Bourgeois Gentilhomme."—It is *socially* absurd. For if "Gentleman" be taken in its popular acceptation, for "man of honour," its attribution to a few is a gratuitous and groundless insult upon the many. But, in both its acceptations, the collegial distinction is, socially considered, a matter either of scandal or of contempt.—It is *politically* absurd. For the Crown itself, while it creates a nobleman, is unable to create a gentleman. Gentlemen, however, the English colleges presume to make and unmake. But in truth, their conservative Heads do what in them lies radically to level ranks, by subverting in their Houses the natural aristocracy, of which, for a paltry gain, they consent to prostitute, vulgarise and render ridenlous the very name. With these collegial heralds, (as with some heraldic colleges,)

—"*titulos regina Pecunia donat*
Et genus et proavos, sordesque parentis honestat."

—It is *academically* absurd. For the distinction is, throughout Christendom, known only in the English Universities. In these, it is even unknown to the public and statutory University, either of Oxford or of Cambridge; it originates exclusively in the license usurped by the private Houses, the Houses through which the national seminary has been illegally superseded; and even of these, it is tolerated only in a minority of the Colleges, in a majority of the Halls, as an excuse for certain extraordinary charges, whilst in the (educationally) best,—indeed, in most of the Houses, it has been abolished, as at once a nuisance and an opprobrium. But the abuse is carried to its climax,—carried, indeed, into another category, by being made, in many cases, a mean of pecuniary extortion. Accommodation in a licensed House is, in the English Universities, necessary, and, at the same time, *now* limited; a long previous application is requisite for admission into the better Houses; and the others are thus able, without leaving their lodgings unlet, to compel the intrant to compound for the sham title and the suicidal privileges, which are paid for—and despised. Nor by these colleges can it be said,—"*My poverty and not my will consents;*" for to aggravate still farther the disgrace, the wealthiest foundations are the principal extortionists.

But, finally and principally, it is *educationally* absurd. The Houses profess to afford the means of education, to replace, in fact, of themselves, the University; and yet, in so far as they maintain this distinction, they do all within their power, to frustrate the whole scantling of instruction which they now dispense. For, as regards the members themselves styled "Gentlemen Commoners:"—these, admitted, ostensibly for education, are relieved from educational discipline, albeit precisely those for whom such discipline is most imperiously requisite. They are virtually told, indeed, by collegial wisdom, that though academical residence may be a fashionable form, academical study is of very trivial importance.—And, as regards the other members:—there is thus authoritatively introduced, fostered, paraded, and imposed, in

be safely supposed to bring with him to the University; and this motive, as we have seen, Oxford does not fully employ. To correct this deficiency, there are certain conditions which it is requisite to fulfil.

In the *first* place, there are the conditions of *publicity*, *numbers*, and *co-equality*. These would be conjunctly supplied, were the alumni of the University once again collected from the privacy of Hall and College into the publicity of the academic "Schools,"—from classes of an average of seven or eight (Coplestone's estimate) to classes of a hundred or a hundred and fifty.

In the *second* place, the competition roused in large and public classes can alone supply the deficiencies of the public examination for a degree, viewed as an instrument of emulation; for in them may the stimulus be applied to *all*, and to all during their *whole course of academic study*.

In the *third* place, the condition of *exercise* (Examination, Disputation, Writing, &c.), as the mean through which the learner may distinguish himself, can alone, or alone in any adequate

what ought, in what professes, to be a domestic society for sedulous application, a contagious example of favoured idleness, insubordination, extravagance, and contempt of knowledge. "It is at College above all places," says Napoleon, (Bourrienne, I. xxv.) "that equality should prevail." At least, the only inequality recognised in a seminary of education should be that of intellect and learning. In Oxford and Cambridge, however, some Houses still think differently. *To pay more, to learn less*, in them obtains academical distinction,—is actually proclaimed, in these foci of illumination, the criterion of a "Gentleman!"—Especial honour is therefore due to those "gentlemen," who prove themselves not idlers, though thus collegially privileged, nay encouraged, to be idle.

The absurdity is, however, so singular, so flagrant, so perverse, and withal so *vulgar*; that, whilst at present in the reawakening spirit of the Universities, it only languishes in the privacy and division ("Divide et impera,") of the—not best Colleges and Halls: the snobbism would perish forthwith (if from no other cause) under public ridicule, were the students once again collected into classes in the public schools; though I do not imagine that the patrons of the practice would in these venture to propose "reserved seats." But as the distinction is personally profitable, and as to some minds, what is personally profitable appears always to be universally expedient, ("What will not man defend?"); we may be sure, that for this, among other motives, will any restoration of a public and university education be strenuously resisted,—if possible; for a recovery of the University to health, would infallibly, at once, determine a cure of this *scabies debilitatis* in that learned body. And the Houses,—they cannot, surely, always be allowed, both to subvert and to dishonour the University.

degree, be made effective in large and public classes. For only in exercise can the powers of a competitor be drawn forth into energy; and as only in such classes is exercise available, so only in such classes can that energy be compared, estimated, and adequately honoured.

This honour may be awarded by the suffrage, either of the whole class (taught and teacher), or by the Tutors alone. A combination of the two would, I think, be preferable; and perhaps thus:—Suppose that the students of the same book are distributed into three University classes; each amounting to the maximum of a hundred and fifty. At the close of the academical year, let the (regular) attenders of a class designate by suffrage, say thirty (or twenty) of their number, as worthy of the first, second, &c., place of honour. These honoured students may be divided into decades. The nine decades may then be taken by the Tutors of the three classes acting together; the students of the corresponding decade all tried against each other; and the whole thirty finally subordinated in the order of merit. This ultimate arrangement would thus be partly the work of the pupils, partly of the Tutors.—The whole division into decades may, however, and perhaps profitably, be omitted; the final distribution of the ninety places of honour among the ninety preferred students, being, with any adequate restriction, left to the Tutors.

Before the suffrages of a class are taken, a solemn promise (in fact an oath) of conscientious performance of duty to be required of all voters by the presiding Tutor; and (to make the performance more easy) the suffrages to be given in writing, with the voter's signature, to be known, therefore, only, as counted by the Tutors. The Tutors themselves to promise in like manner. The list of honours to be printed in large characters; a copy sent to each House; and one framed and hung up in some public place of the University. It should appear perhaps in the Calendar.

5. *The DEGREE or Certificate of Proficiency in Arts.* (Pp. 780, and 797, with 736, sq.)

It is proper, in the first place, to state what Oxford has done in this respect. And here it is necessary to distinguish the past and the prospective legislations of the University, establishing, as they do, two very different schemes of Examination for this degree.

By the past legislation of the University, I mean that commencing in 1807. In this, down to the present time, (to say

nothing of the Responsions), 1°, there was only a *single examination*, and this first competent in the thirteenth term or commencement of the fourth year; and 2°, in that examination there were only *two Departments* of trial and distinction,—the *Literæ Humaniores*, and the *Disciplinæ Mathematicæ et Physicæ*,—which latter was wholly optional to the candidate. So far all was uniform. But several steps, through several statutes, multiplied the *classes of honour* in each department, from *two* to *four*; persons in the same class being always accounted equal, and alphabetically arranged.

By the new statute (passed in 1850, and to commence in the Easter Examination of 1853), the preceding scheme is changed in sundry important points.—Besides the Responsions—there are to be *two Examinations*, with *two relative Classifications*: the First, commencing with the eighth and ending with the twelfth term; the Second, commencing with the thirteenth and ending with the eighteenth term, (normally at least and for honours).—The first of these Examinations has, as of old, two Departments, and these nearly the same; to wit, *Greek and Latin Literature*, and *Pure Mathematics*,—which last is now, as formerly, wholly optional. Each of these departments is to have only a *First and Second Class of Honour*. In these classes all the candidates are, as hitherto, equal,—their names being alphabetically arranged. For the first time, the names of those who pass without honour are to be published.—The Second Examination, which is new, has *four* departments, or, as they are not happily called, “Schools;” to wit, *Humane Letters*,—*Mathematical and Physical Sciences*,—*Natural Science*,—*Jurisprudence and Modern History*. Each of these departments has, what is old, four Classes of Honour, in which the names follow alphabetically, and are of course published. But besides these classes, the names of those who merely pass, are henceforth, as in the first examination, to be also recorded.—To qualify for a degree, it is necessary to pass again in the department of *Humane Letters*, and (besides attending two courses of Public Lectures in the University) to pass in *some one* of the other three.

Neither of these schemes, though both in certain respects are praiseworthy, seems to me such as ought to satisfy a University, and that the University of Oxford. In so far as encouragement is thus given to pursuits useful, as well objectively in the pursuit of other studies, as subjectively in the cultivation of the student's

mind, they are of course deserving of approbation. But these ends, neither scheme of examination appears at all adequately to accomplish. In fact, while the former shows as imperfect and redundant, the latter shows not only as imperfect and redundant, but even as suicidal.

In the *first* place, the *imperfection*, common to both the schemes, is manifested in the want,—academically unexampled out of the illegal condition of the English Universities,—of a really philosophical department, for study and examination. But of this I have already spoken (pp. 786, sq.)

In the *second* place, the *redundance*, common to both, lies in the mathematical department (pure and applied.) Mathematical study, it is perhaps idle to repeat, we here consider, not in its *objective* relation as a mean in or towards certain material sciences; but in its *subjective* relation exclusively, as a mean of cultivating the capacity itself of thought. In this point of view, I have already shown, and at great length, (pp. 263–340, 676–704), that it is useless, even detrimental, if not applied temperately and with due caution; for, instead of invigorating, it may enervate the reasoning faculty, and is, therefore, a study undeserving of an indiscriminate encouragement in a liberal education of the mind.

In this relation, Oxford seems at fault, in both its schemes of examination. In the former, the Mathematical sciences obtained one of the two departments between which the academical graduation trial was divided; though Oxford, leaving always these sciences wholly optional to the candidate, stands in favourable contrast with Cambridge. For this University making Mathematics, and Mathematics alone, a passport to its degree and relative distinctions; in fact, seemed as if it acted on the futile inscription falsely imagined over Plato's school.

In the prospective statute the inconsistency is, perhaps, even enhanced. For here, though Mathematics are still always optional, they, however, constitute ostensibly a moiety of the first examination. But the policy of the Oxford Convocation in conceding to the *Disciplinæ Mathematicæ* a half of the whole academical honours, is shown to be unwise, even by the evidence drawn from the Oxford examinations themselves. And thus:—

Looking *firstly* to the *Instructed*.—For the decade from 1838 to 1847, we have the following results: All the honours in D. M. (255) bear the proportion to all the honours in L. H. (923) of

somewhat more than a *fourth*. Again, about *four-fifths* (79 out of 106) of the First Class of L. H. are in no class of D. M. at all; whereas only about *one-fifth* (10 out of 48) of the First Class of D. M. are in no class of L. H. Finally, there are *six-sevenths* of men classed in L. H. who are in no class of D. M. (822 to 124); whereas there is hardly more than a *half* (136 out of 260) of those having an honour in D. M. and no honour in L. H. In fact, those taking a Mathematical honour amount even to a number, thus comparatively small, in consequence of the comparative *facility* by which such a distinction can always be obtained.

Looking, *secondly*, to the *Instructors*.—The Table (pp. 746–747) exhibits a still more striking illustration in reference to them; for the teachers, and in particular the Tutors, should, if at all competent to their function, manifest a greatly larger proportion of highest honours in a department specially encouraged by the University, than the undergraduates at large, even of the highest colleges. But mark what is the case. *Nineteen* Houses alone have any recognised Tutor; the other *five* are consequently beyond criticism. Of the nineteen: Out of the *highest twelve*, only *two* (5 and 7) have even a single Tutor in this First Class; and no House has more. Mathematical talent rises, however, as the Houses sink. Of these the next lower, and but for one the lowest, *six*, show each a Tutor thus honoured. There are, consequently, in all, *eight* Tutors with the highest (that is the one not disqualifying) Mathematical distinction, and *forty-one* without it; a proportion, in other words, of less than a *sixth*.—And to descend even to the lowest: *five* Houses, (four Colleges and one Hall), have among their Tutors no honours whatever; whilst *three* Colleges rejoice in a third class; and *three* also in a second.

I am far from disparaging the present members of the University of Oxford, for this deficiency in Mathematical study. On the contrary, I think that the indifference to Mathematical distinction, there now manifested, both by teachers and by taught, is certainly not greater than the educational inexpediency of mathematical study might amply warrant. But granting this, the practice of Oxford, if its attribute be prudence, condemns the wisdom of its own legislature. Nothing, indeed, can be more irrational, than for a University specially to encourage, and to encourage, too, at the expense of others, a study, both so worthless in itself as an educational mean, and, notwithstanding all external and fac-

titious fostering, so justly rated at the proper value by its own members in general, teachers as well as taught. Is this denied? The dilemma then emerges:—If Mathematics be truly *deserving of academical protection*, in a course of liberal education, what must be thought of a University which abandons so indispensable a science to *twenty-four* seminaries—to *forty-nine* Tutors, only *eight* of whom—are not proved comparatively incompetent to teach it? If, on the other hand, this science be *unworthy of academical encouragement*, what must be thought of a University, which, at the cost of the other moiety of its instruction, accords to a subjectively useless or detrimental study *one-half* of its formal *education*, *one-half* of its formal *honours*?

In leaving the Mathematical disciplines always optional to the candidate, Oxford acted, in my opinion, rightly. But why, regarding Mathematical study as of so ambiguous a use, as to be wholly unnecessary, even to those whom it distinguished by the highest honours, Oxford should still accord to so *doubtful*, so *dispensable* a study, a full *half* of its professed education, and a full *half* of its proclaimed distinction;—this, I confess, appears to me an insoluble contradiction. From the new Examination Statute, we have seen, that Mathematics, (pure and applied,) are to constitute one of the three optional “Schools,” in the second examination. So far, so reasonably. But why in the First Examination, pure Mathematics should be still left, though still always unenforced, to counterbalance, in appearance, the all-important cycle of imperative instruction, comprised under the name of Greek and Latin Literature;—what is this but a remnant of the old inconsistency,—of the former futile attempt at conciliating two conflictive opinions?

In the *third* place, the new or prospective statute is suicidal; for it tends to reduce the value of the very honours which it proposes to enhance. This effect is direct; and results not from one, but from many various causes.

1°. To speak first of the same department:—The value of an Honour depends upon its *unity*.—What is prized, as singular, is disregarded or contemned, as plural. The imagination, in fact, is no longer agreeably affected; it must even exert itself, and not unpainfully, to escape confusion. How much more satisfactory is it, on the present scheme, to be of a First Class, with its *one* possible contingency; than, on the future scheme, to be of a First Class, certainly, but of a First Class varying for better for worse,

uncertainly to any of the *seven* unequal combinations of a highest honour in the same department! Thus, the division of the honour into two is, for its own value, for its own efficiency, to be deprecated. No harm, on the contrary, could have ensued,—indeed, it would have been a manifest improvement,—to allow the candidate to divide his examination, to give up one class of books or subjects at an earlier period, another at a later, and then to have all his answers taken conjunctly into account, in determining his rank in one ultimate and first published classification. But of this again.

2°. An Honour is prized in proportion to its *rarity*. But *twenty* classes, comprising *six* First Classes of Honour, are henceforth to be awarded, where *eight* and *two*, respectively, were heretofore conceded; academical Honours therefore will incontinently become cheap and vulgar, from their very numbers.

3°. But what, besides vulgarity and cheapness, reduces Honours to the lowest, is that, though nominally equal, these are not the *equal rewards of equal talent and exertion*. This absurdity at once debases a whole system of Honours; what had previously been respected, is now indiscriminately despised. Such a result will, I am constrained to think, be the natural, even the necessary, consequence of the new statute. We have here four or six rows of Honours—of classes, the same in name, in rank, in number, and assigned to four or six co-ordinate departments of knowledge. Apparently, and for aught that the statute intimates, all these co-ordinate departments and corresponding classes convey to a candidate the same amount of honour. He is equally by the University a supremely distinguished graduate, whether he be First Class in one or other of the departments. And yet the truth is, that here there can be no proportion between department and department, between class and class. A man may fail after long years of toil in meriting the highest Honour in one department, who may obtain it in another, by the amusing occupation of a few weeks. The absurdity is however carried to its climax, when it is considered that the University here stimulates the shorter, easier, more attractive, but less useful study, to a neglect of the study, more useful, though less attractive, easy and short. The University, in fact, thus errs in a *sixfold* manner. In encouraging, what—1°, needs no encouragement; and 2°, is less deserving of it; in not adequately encouraging, what,—3°, needs encouragement; and, 4°, is more deserving of it; for,

5°, it awards the same amount of honour to the brief, facile, amusing, and to the tedious, difficult, irksome; thus, 6°, promoting what requires and merits no protection, at the expense, even, of what pre-eminently does both. Many years ago, I contended (p. 357) that of all British Universities, Oxford (from accidental circumstances, indeed,) stood alone, in affording, however inadequately, to solid learning the preference and encouragement academically due; and stated it as my "conviction, that if the legislature did its duty, Oxford was the British University susceptible of the easiest and most effectual regeneration." But this, if the present statute be allowed to stand, I can no longer even hope; and now that this ancient school itself has been drawn into the vulgar vortex, I contemplate nothing but our Universities, one and all, declining into popular seminaries for a cultivation of the superficial, the amusing, the palpable, the materially useful. Were it indeed attempted, under this statute, to equalise a class in one department with the corresponding class in another; the attempt, if possible, would conduce only to render matters worse. For example, could a highest Honour in the "Natural Sciences," only be obtained like a highest Honour in the co-ordinate department of "Humane Letters," after an arduous and engrossing study during many years; then would application be diverted from the fundamental, total, and comparatively useful, to the adventitious, fragmentary, and comparatively useless. But this is impossible. The Natural Sciences are essentially easy; requiring comparatively little talent for their promotion, and only the most ordinary capacity for their acquisition. Their study, therefore, does not cultivate the mind. As Bacon remarks of induction applied to physical pursuits:—"Nostra via inveniendi scientias exæquat fere ingenia, et non multum excellentiæ eorum relinquit. . . . Hæc nostra, (ut sæpe diximus,) felicitatis cujusdam sunt potius quam facultatis, et potius temporis partus quam ingenii." N. O. i. § 122.) In thus honouring the easy and amusing, equally with the difficult and painful, our Alma Mater imitates the nurse who would bribe the child by the same reward, to a dose of bitters or to a sugar plum. The comparative inutility of all the new "Schools," with the old department of *Mathematics*, is indeed virtually confessed in the prospective statute itself. For the candidate is herein allowed to omit all of these except *some one*; the University thus according its highest Honour to his proficiency in a kind of knowledge which it

admits to be unnecessary, and although he may be no proficient in any knowledge of any of the kinds which it proclaims as indispensable. The only commendation merited by this statute, is, that it shows in favourable contrast to the Cambridge Examination Graces of 1848,* of which it is, however, manifestly an imi-

* This is saying little in favour of the Oxford Statute, for the Cambridge regulation equals even the worst measures in that University, and is wholly unparalleled in any other. The thing is not only illegal, but beneath criticism; if regarded as aught higher than a tax on the undergraduates of Arts, in favour of all and sundry who, in the Cambridge spectral faculties of Law, Medicine, &c., are accidentally decorated with the nominal status of Professor. The students of the Liberal Arts are taxed for the profit, among sundry others, of two Professors of Medicine, two of Law. But whilst thus commended to special sciences, which no other University has ever even proposed to the alumni of its general faculty, the Cambridge student of this faculty has no opportunity afforded him of becoming acquainted with what all other Universities, and Cambridge itself by statute, justly regard as the most essential of preparatory disciplines. This new regulation is, indeed, only the last of a series of illegalities, calculated, not for the permanent good of the nation and University, but for the temporary advantage of the usurping interest. In Cambridge the student is now, and has long been, taught, not what and how he ought to learn, but what and how it is possible—it is convenient for that interest to teach him. Even in the preparatory faculty, he is, therefore, treated to Mathematics, not to Logic; inured to calculate like a machine, not disciplined to reason like an intelligence. The easier sciences,—Physics—Physiology,—Physic even, are presented to him at random, and in various forms; Psychology and the more arduous gymnastic of philosophy, in none. His attention is multifariously expanded on the world without; but, never is his reflection contorted on the world within. If many things, both right and wrong, be taught him of material forces, he learns nothing whatever of mental powers; and though, perhaps, superficially indoctrinated touching the functions of his body, he is left scientifically uninstructed, that he even has a soul.—In all this illegal Cambridge, (with the partial—I say the *partial* exception of illegal Oxford,) stands alone.—Indeed, whatever mechanism for the time the Tutors were capable of teaching, that in Cambridge has been always sure of being academically proclaimed—the one thing worthy to be academically taught. Above a century and a half ago, Philosophy was tutorially contracted to the easy mechanism of Physics, and extended to the easier mechanism of Mathematics. For sixty years, as has been said, after the appearance of the “Principia,” the physical doctrines of Newton were treated by the Tutors of his own University as false and perplexing innovations, and the (self-styled) romances of Descartes, who also confessed the anti-logical effect of mathematical study (p. 277.)—continued to be there collegially inculcated, as the only elements of a sound and scientific education. Compelled, at length, to follow the age and its intelligence, for fifty years, Newtonianism in Physics and Mathematics remained in Cambridge the symbol of academical orthodoxy. But,

tation. For both measures innovate in the same ways; both curiously invert the very purpose of an academical honour; and both seem more or less intended to bestow on the Professors who, in any defunct faculty of the University, chance to have a titular existence, a certain profit out of the candidates proceeding in the still living faculty of Arts.

The principles which I have stated of academical education, (pp. 765, 767, 780, sq., 786, sq., 797,) would here require the following fulfilments. (It is proper, however, parenthetically to premise, that I here say nothing of Religion. In this respect, I wholly acquiesce in the views of the Oxford legislature,—that a certain amount of theological information should be required of candidates, but that theology ought not to be proposed as a study in the faculty of Arts, from which academical distinction should be won.)

1°, The University should confine its *highest* honours to those departments of study which are *most arduous*, being, at the same time, *subjectively and objectively most useful*. This would limit

finally, for the last fifty years, the *most* mechanical Mathematics—the algebraic analysis, educationally condemned by Newton (p. 316),—has risen to a decided predominance in Cambridge; and that school is now at once anti-Newtonian, anti-Cartesian, anti-Geometric. Of what value, then, are the recent opinions of the Cambridge Syndicate or Cambridge Senate, in regard to “the superiority of Mathematics, as the basis of General Education?” Would they seriously maintain, (the reverse of all authority, as indeed of obtrusive fact,) that mathematicians, out of mathematics, reason better than their neighbours?

The very constituting of interested parties into the official, and (even exceptionally) unsworn arbiters of sufficiency and distinction, would be decisive of the new “Triposes”—for the absurdity does not apply to the old. In every University where such impolicy has been followed, as, indeed, it too generally has, degrees and academical honours have there become contemptible. But, in this instance, Cambridge abandons the function of trial and classification to these *ex officio* examiners, who, in all respects unlike the other special examiners, are both unrestrained by any form of obligation, and yet beset by interests of various kinds, inciting them to attract competitors from the old Triposes to the new, by rendering the honours of the easier and more amusing studies, more easy also of attainment. The Oxford statute avoids many of these errors. The examiners it appoints, are specially constituted *ad hoc*,—sworn,—and not interested; nor does it tax the students of Arts for the Professors of Law, Medicine, &c.—But as if to consummate the absurdity of the Cambridge regulations, while the aspirants of the new Triposes are left absolutely free, no one is allowed to compete for Classical distinction who has not previously taken a Mathematical honour!

the departments thus honoured to two; the one of which may be denominated that of *Humane Letters*, the other, that of *Philosophy*. The former is of *empirical*, the latter of *rational* knowledge.

Empirical knowledge is a knowledge of the *fact*. Humane Letters would thus comprehend all dexterity at language, all familiarity with literary products, all acquaintance with historical record. This department, by the conditions stated, should in a great measure be limited to the domain of Greek and Roman letters.

Rational knowledge is a knowledge of the *cause* or *reason*. Philosophy would thus comprehend,—in a proximate sphere, the science of mind in its *faculties*, its *laws*, and its *relations*, (Psychology, Logic, Morals, Politics, &c.); in a less proximate sphere, the science of the *instrument* of mind, (Grammar, Rhetoric, Poetic, &c.); in a remoter sphere, the science of the *objects* of mind, (Mathematics, Physics, &c.). The conditions stated would exclude this last section from the department of *highest* honour; for the sciences which it comprises are subjectively too unimproving, and objectively too eccentric, too vast, and withal too easy, if not too attractive, to be proposed as academical disciplines of preparation. The Oxford distinction of the Mathematical and Physical sciences, into a department by themselves, is therefore, I think, right; as right, also, the leaving the study of that department to the option of the candidate. I must, however, dissent from Oxford theory, (contradicted, as has been seen, by Oxford practice,) which elevates, or has elevated, this section of science into one of the two departments of highest honour; for I would not only divide (what is still confounded,) the *Literæ Humaniores* into the two, and two exclusive, departments of highest honour, but relegate the *Disciplinæ Mathematicæ* to a lower order, of which I am soon to speak. The present confusion of the Empirical and the Rational in the one department of *Literæ Humaniores*, originated in the inability of the Tutors, as at present constituted, to teach Philosophy as it was taught of old, and as by statute it should be taught still. The elevation of the University teacher is consequently a condition of the restoration of Philosophy to its proper place; and of these I have previously spoken (pp. 786–794.)

Leaving then *Humane Letters* and *Philosophy*, (apart from the Mathematical and Physical sciences,) as two departments, afford-

ing two several series of primary honours ; it is evident, that as proficiency in either or in both of these affords the exclusive qualification for a highest academical distinction, so a minimum, not in one but in each, ought to be established as the condition of a degree at all. What, however, the amount, and what the contents of these minima should be,—this is a matter of detail I overpass.

When a candidate aspires to Honours, as I have already said, it might be an improvement to allow him to give up his books and take his trial, in part, before a last examination ; provided, that a plan could be devised, whereby the value of his two examinations could be fixed, added, and duly rated in a decisive classification. Of this I shall speak in the sequel.

2°. Besides the departments of study, which, as most arduous in themselves, and also most useful, both subjectively as mental disciplines, and objectively as conditions of an ulterior progress in knowledge, merit pre-eminent encouragement in the fundamental faculty of a University : there are other departments, which it is proper that a University should, in a *lower degree, promote* ; care being taken, that the minor favour shown to the latter, do not interfere with the higher favour due to the former. All the studies not the *necessary* conditions of a degree are to be excluded from its *higher* distinctions ; and this by the admission of a University itself. Thus Oxford, in leaving, (rightly, I have said,) Mathematics to be taken up or not for examination, as the candidate may himself think fit, virtually confesses, that as a mathematical minimum is not a requisite for its degree, so a mathematical proficiency is not an attainment to be distinguished by its highest Honours. For, (as a selection must be rigorously made,) a University ought not to encourage by its chief distinction a science which it does not view as of absolute necessity ; since thus it would frustrate even its own end, by promoting the unessential at the expense of the essential. This must, in fact, tend to frustrate even the Honour itself. For the competitors would be few, the standard low, and the distinction consequently undervalued. And of what account are the mathematical Honours in Oxford, we have already seen. It may, indeed, be doubted, whether, in that University, these Honours do not operate as much in counteracting the study of Literæ Humaniores, as in promoting the discipline for which they were exclusively organised.

On this special ground, (and independently of the general pro-

priety of the measure,) Mathematics ought, in Oxford, to be relegated to that lower order of sciences, proficiency in which should entitle a candidate to honour certainly, but to honour decisively inferior in degree to that awarded to excellence in the sciences comprised in the higher. Beside, therefore, the superior studies, in which a certain minimum of progress is necessary for an academical degree, and to the various pitches of proficiency in which, the various amounts of highest academical honour are due; a University may, further, reasonably require, as a condition of its degree, a certain competency in some one or more of certain inferior studies, and it may also reward any greater progress in these, by an inferior honour. Of this order are many branches of knowledge which, as easier and more attractive, do not require external promotion, or which, as less useful, subjectively and objectively, do not, by comparison, deserve it. Of this order are all "the schools" in the new Oxford statute, with the exception of the Literæ Humaniores; these ought not, I think, to appear here at all. But to this secondary order of alternatively optional studies, about which, as less essential, we need be less scrupulous, I would add a certain mastery of the principal modern languages. For, assuredly, the candidate who is able to follow out his pursuits, without impediment, through French, German, Italian, &c., is less unworthy of a degree, than the candidate who, ignorant of these tongues, still passes for the minimum, or even obtains an honour in some of the secondary departments.

But again: A University, like Oxford, which employs Tutorial instruction, and consequently limits the academical study of the pupil to a determinate series of approved books, has, at its disposal, certain powerful means of ensuring and ascertaining the proficiency of candidates for a degree; and should these remain unapplied, the University may justly be reproached for neglecting or for not understanding the peculiar *advantages* of its peculiar system.

The *first* of these advantages—is the capability, in so far as that may be expedient, of *regulating the Order of academical Study*. The objects of this study are not all, are not even for the most part, isolated from each other. Many stand in consecution. Certain subjects, certain books, can only be profitably studied after others. A University, like Oxford, can therefore usefully prescribe, not only, in general, that the higher shall always presuppose the lower; but articulately, what are the sub-

jects, and what the books, which ought to be consecutively studied. This is even a duty for such a University; and the series being once promulgated, there is no hardship on the candidate for a degree in being subsequently obliged to accommodate his reading to the proper order of study. Such a regulation, though it ought not, of course, to be carried beyond certain bounds, will naturally cause the greater number of the books given up by candidates to be the same; and this identity, in the object matter of examination, will render it, as we shall see, a very easy problem to ascertain with the minutest accuracy the comparative proficiency of examinees.

The *second* of these advantages—is, that the books of study and examination being limited, these *Books can be comparatively rated*; that is, a determinate value, (to be expressed therefore by a certain number,) may be publicly assigned to each. If a candidate answer the questions proposed to him on any book, all and all fully, he would naturally be entitled to the whole number at which the book is rated. Should a candidate fall short of this completeness and accuracy, the value of his answers could be expressed by any smaller number, down even to zero; nay, if it were requisite, a negative number might punish his presumption, and fall to be deducted from any positive amount which he might otherwise obtain. Did the answers transcend simple plenitude and correctness, a number above the full value of the book might, but only as an extraordinary exception, be allowed.—I need hardly add, that a book may have a value in more than one department; it may, for example, avail, and variously, in Humane Letters, or in Philosophy, or in both. A separate estimate should therefore be assigned to it in reference to each.

The *third* of these advantages—is, that the several *Classes can be determinately valued*, and this value with great utility, publicly made known. The several books being articulately rated; and the rule, by which their amount can be made available by candidates, being understood; it follows, even as a matter of course, that the University should state the amounts—the numbers, which being attained in a certain department, would entitle to its several classes.

The *fourth* of these advantages—is, that instead of leaving them, as at present, unarranged, we might have *Candidates of the same class placed therein before and after other*, according to the rated value of their examinations; nay, if numbers were affixed to

names, the men of one class and of one examination might be brought into collation with those of another. Were this arrangement, indeed, realized in the case of First Classes alone, still would the principal advantage of the measure be compassed. For it is only in a First Class that signal risings of individual above individual are possible; but for a University, without necessity, to equalise such differences, is, if not unjust, certainly inexpedient. In this respect Louvain and even Cambridge may afford a profitable example to Oxford.

The *fifth* advantage—is, that there might thus be *one Honour and a double Examination*. It would be a great improvement if the object-matter of examination could be taken up in, at least, one instalment; and this persuasion seems to have determined the views of the Oxford legislature, in recently dividing the examination for *Literæ Humaniores* and *Disciplinæ Mathematicæ* into two. But, as already stated, I cannot but regard their division of the *honour* along with the examination as most unfortunate; though, indeed, not having adopted such subordinate measures as have now been detailed, it would, for them, have been impossible to render a double trial available to a single classification. I say, that it is expedient to divide the Examination: and this, were it only that the candidate might be more accurately and fairly tried; while less superiority would accrue to the merely animal advantages of a stronger memory and of stronger nerves. The single prerequisite of this would be,—that the value of the first examination were noted, preserved, and added to the value of the second.

The *sixth* advantage—is, that *the Examination might be rendered at once far more accurate and far more easy*. A large proportion of the candidates would give up the same book. To these, called into the “schools” together, a series of questions prepared and printed for the occasion, might be proposed; and the (unassisted) answers returned in writing before leaving the room. These answers being perused by the Examiners, each paper could be rated at its value, and that value placed to the credit of the candidate. In this manner the trial would in a great measure be easily and accurately gone through. (There is no reason, it may be observed, why the examination of candidates should be completed in consecutive days; nor need an examination in writing supersede any oral questioning.)

Such a standard, as these last five advantages suppose to be

accurately instituted and accurately applied, Oxford does not attempt; but leaves it to each of her transient Examiners to extemporise a criterion for himself, or rather to classify candidates as he may, according to his individual lights, and temporary impressions. That Universities in general do nothing more, is an invalid answer. For the Universities, in which the Professorial or unrestricted system of instruction prevails, can at best only lavish degrees according to a rude appraisement; and are wholly unable (what indeed they right rarely attempt) to classify candidates, even in the vaguest or most capricious manner. Oxford, therefore, in adopting the Tutorial or restricted system of instruction, should, in tolerating its peculiar disadvantages, be able to turn its peculiar advantages to account.—But to conclude: I am therefore, convinced, that it would be no ordinary improvement on the late Oxford Examination Statute, if, prospectively, a regulation were adopted, in principle at least, to the following effect:

Two several Orders of Study to be requisite for examination towards a degree in Arts; and in these the gradations of proficiency to be rewarded by two several Orders of academical Honour.

The first or superior order to have two Departments, to wit, Humane Letters and Philosophy. Certain lowest competencies, in both of these, to be necessary for a degree; whilst, in each, (as now,) a higher proficiency to merit the honour of a corresponding class, if not, moreover, (by a more accurate arrangement,) individual rank among the candidates similarly classified. The Classes of honour, as hitherto, may, in each department, be three or four.

The second or inferior order may comprehend an indefinite number of departments,—departments at least which it is not here necessary to specify. From the candidate (as in the prospective statute,) should be required a minimum in one department, if not in more, which, however, may be chosen by himself; and the honour of a corresponding class to be assigned, as at present, to every higher proficiency in the several departments.

Care, however, should be taken, to mark, and that obtrusively, the difference between the honours belonging to the Orders of the absolutely necessary, and of the partially optional, studies. This might be done, by maintaining the two orders and their examinations sufficiently distinct, by the following or other differences.

(the two first of which are employed, but that inadequately, in the recent Statute): 1°, Distinction of Time; the higher order preceding the lower, as its condition. 2°, Distinction of Examiners; different individuals being, for each order, appointed to this function. 3°, Distinction of Object Matter; no department of the prior order being repeated in the posterior. 4°, Distinction of Name; the one order being called by *Primary*, the other by *Secondary*, or some such discriminative appellation.

Before the examination of the Primary Order can be undergone, three full courses, three Academical Years (p. 812,) to be completed; and this examination, for honours at least, must be taken within a year thereafter. The examination of the Secondary Order, at least for honours, should in like manner be limited to a certain period.

As enacted by the new Statute, the names of all, whether honoured or not, to be published under the department in which they pass.

Taking, finally, a general retrospect of the preceding scheme of academical education, this is seen to comprise various utilities.

It would restore the *University*. It would bring back academical education to its true and ancient significance; reconnecting the Houses and their private instruction with the University and its public discipline.

It loses none of the advantages in the present domestic or Tutorial system, but would correct the manifold imperfections of that system, as actually applied. For it would determine a far higher efficiency; making, at the same time, that efficiency secure and general: whereas the lower efficiency, as at present furnished, is not only contingent but rare, not only limited but confined to a few. As things now are, one House may be an instrument of education, comparatively real; and others, such instruments only in name; nay, even in the same House, study may be in vigorous activity at one time, at another in supine inertia. But this scheme, if realized, would allow—no House to fall educationally asleep,—no Head to gratify his personal preferences at the expense of his official obligations,—no incompetent Tutor to hide his obstructive nullity in the obscurity of Hall or College. For, while it would elevate the Tutor from a private into a public instructor; in raising his dignity and emolument, it would raise also his qualifications, usefulness, and duties.

It commits in a beneficial contest, (“*ἀγασθῆναι δὲ ἑαυτοὺς ὑπὲρ ἑαυτοῦ*,”)

House with House, Tutor with Tutor, Pupil with Pupil; applies equably the stimulus of emulation to all, from the commencement of the academical curriculum until its termination. It opens, in fact, a new field of exercise and excitation; leaving no one to inertion, be he teacher or be he taught, but goading each unceasingly to the best,—according to his kind of duty, and in proportion to the measure of his powers.

Restoring, it would constrain the University:—to employ its instructors in the most edifying ways;—to propose, not what can most conveniently be taught, but the best objects, in the best order, and in the best books; to measure accurately the amount of energetic talent usefully employed;—and to reward this, by proportionate and appropriate distinction.

Far, therefore, from superseding the Examination for a Degree, it would prepare the candidate, subjectively and objectively, to undergo it; enabling him to remedy his defects, and rendering it a more effectual and certain test of his proficiency.

I should now proceed to the consideration of—

b) *Things secondary or supplemental.* But matters principal have extended to such a length, that I must not enter upon others which, though of importance only as conditions of the former, could not possibly be discussed within a narrower compass.—Of these there are *two*, more especially meriting attention, but to which I can only allude.

The *first*—is a scheme of academical *Patronage* and *Regulation*, accommodated to the circumstances of the English Universities, more proximately of Oxford. And here, beside the subject in its more essential relations, it would be requisite to consider the impediments which an improved regulation of these schools would inevitably encounter from parties—in the Universities themselves,—in the Church and its Patrons,—in the Government for the time,—and in various influential interests throughout the nation; impediments so great and numerous, that we may regard almost as chimerical, the hope of seeing these institutions raised to the perfection, implied in a due accomplishment of the great ends for which they were established. In fact, my suggested plan of improvement for Oxford, was partly founded on a conviction, that a Tutorial instruction depends less, for its efficiency, on the virtues of an academical superintendence and appointment, than does a Professorial. (On these virtues see pp. 362–400.)

The *second*—is a scheme for the erection of new *Halls*. This

would be a return, in part, to the ancient custom of the University ; and must inevitably take place, were an increased resort of students determined to Oxford,—unless, what we need not contemplate, domestic superintendence should here, (as in Cambridge,) be relaxed, for the pecuniary interest of the existing Houses. New Halls should be erected:—1°, to supply additional demand for entrance ; 2°, to prevent or remedy a slovenly tuition in the older Houses ; 3°, to keep down (independently of more direct measures) the expense of the Colleges, and to afford a cheaper education to the poorer students ; 4°, to accommodate dissenters, were they, without a surrender of their principles, admitted for education to these national seminaries, (pp. 487 sq., 544 sq.) ; and 5°, to remunerate, in their Headships especially, academical zeal and ability.—Of course the *new* Halls should be of a better constitution than the old.

The other measures under this head, as—a *general taxation of the necessary collegial expenses*,—the *means of remunerating the academical instructors*,—of *retaining talent in the University*,—and of *pensioning emeriti*,—*libraries*,—*musea*, &c. ; these, however important, I can at present only name.

ADDENDA.

P. 274, to the end of Note †, add :—

(1853.) On reading over the preceding, (besides noticing a misprint for *ἀε*,) the following occurs as a still simpler emendation.—'Ἐκαστος δι κρίσει καλῶς ἢ γινώσκει καὶ τούτων ἑστίν ἀγαθὸς κριτής καθ' ἑκαστον ἀρεα, ὁ [καθ' ἑκαστον] πεπαιδευμένος, ἀπλῶς δι, ὁ περὶ πάν πεπαιδευμένος.—Here, the only change is the insertion of the two words within square brackets,—words which were very likely to be omitted by the copyist, standing as they do almost immediately before.

P. 602, l. 7, to *Nothing* add (†) and subjoin the following Note :—

† (1853.) Lest in the sequel it be omitted, I shall here in the outset, at least indicate, what, along with the philosophy of which it is the basis—the Philosophy of the Conditioned, has been strangely overlooked by metaphysicians: I mean the distinction of the *Necessity of Thought* into two kinds, the *Positive* and the *Negative*; the one the necessity of *so* thinking—(the impossibility of *not so* thinking,) determined by a mental *Power*; the other the necessity of *not so* thinking, (the impossibility of *so* thinking) determined by a mental *Impotence*.

Leibnitz was the first who, articulately at least, established the quality of *Necessity*, (the impossibility of not so thinking), as the criterion of our native or noetic or non-experiential notions and judgments. This was more fully developed and applied by Kant; and, with a few feeble reclamations, this part of the Critical Philosophy has been generally accepted wheresoever it has been adequately understood. In fact, the doctrine of *Necessity*, the test of unacquired cognitions, may now be laid down as an acknowledged criterion, nay almost as a common-place, in Metaphysics—out of England.—But Leibnitz, Kant and subsequent philosophers have not observed, that we must distinguish this *Necessity* as it proceeds from the one or from the other of two, and even two counter, sources; thus dividing it into two great categories,—categories which fall themselves to be afterwards subdivided. For, 1^o, we may not only be able, but be positively determined, to think one alternative, whilst impotent to conceive its counter; and 2^o, we may be negatively unable to think one contradictory, and yet find ourselves equally impotent to conceive its opposite. The former, from a *Power*, is thus primarily inclusive and secondarily exclusive; the latter from an *Impotence*, is thus simply and bilaterally exclusive.—And while it has always been acknowledged, that of contradictories *the one or the other* must be, and be thought, as *indiscriminately NECESSARY*; we are brought by this novel doctrine to the further confession, that even of contradictories we may, however, not be able to realise in thought the *discriminate POSSIBILITY of either*.

This distinction also affords us the all-important contrast of *legitimate* and *illegitimate* thought; thus enabling us to explain some of the most inveterate and pervasive hallucinations in philosophy. For whilst the *Positive Necessity* of so thinking never illudes, is never even the occasion of illusion; the *Negative Necessity* of not so thinking is, even naturally, the source of deception. For if, on finding one alternative to be inconceivable, we recoil at once to the conclusion,—*that this is false, and the contradictory opposite therefore true*, (and our right—our obligation even,

to do this has been explicitly asserted, especially in the Leihnitian school.); the inference, though this be even difficult not proudly to admit, will be logically false,—the consequent containing more than the antecedent; and thus in philosophy (whether of theory or of practice) we shall be precipitated into a variety of errors. (See Footnotes to Reid, p. 377, a.)

The development and application of the latter of these Necessities (in combination however always with the former,) constitutes the *Philosophy of the Conditioned*; the Philosophy of the Conditioned is, therefore, the unexclusive complement of a recognised and of an overlooked principle of mind.—So much it is here requisite to hint by way of preparation.

P. 700. To Note * add as follows:—

(1853.) Speaking of Apuleius, I may notice, that though a host of the ablest philologers have, since the restoration of letters, been occupied upon his works; the valuable treatise “De Philosophia Rationali sive Intellectus,” is still, not only without a satisfactory recension, but in the most shameful state of cureable corruption. In manifestation of this I shall quote, and at the same time correct, the passage proximately pertinent to the problem mooted; and shall take it also from the “editio optima”—that of the learned Oudenorp, who with ample subsidia, (five MSS., all the editions, and all the previous critical tentamina,) was, for thirty years, engaged on a constitution of the text. And here: I shall first give the original; then the editorial annotations; and finally the proposed emendations. I shall also distinguish by italics the words to be corrected,—the corrections,—and all relative thereto. In other respects, I adopt the text of Oudenorp, apart from his punctuation.

TEXT.—“Quas (conclusiones) si quis velit singulatim sub unoquoque (modo), per omnes formulas poterit suggerere ad exemplum, quod proposuimus. ut etiam *hypotheticorum* [*H. vulgo*] more, per literas ordine propositionum et partium commutato. sed vi manente sit primus indemonstrabilis: ‘A de omni B, et B de omni C, igitur A de omni C’. incipit a declarante, atque ideo et a secunda propositione. Hic adeo modus secundum *hos perfectus*, retro talis est: ‘Omne C B: omne B A: omne igitur C A.’ Stoici porro pro litteris numeros usurpant, ut: ‘Si primum, secundum: atqui primum, secundum igitur.’ Verum Aristoteles,” &c.

NOTE.—“Sed vi] Woverius ‘sed, III.’ id est, ‘tertio’. COLVIUS—Male. OUDENORPUS.—Lipsius also has ‘tertia.’ But this is shown to be wrong; for, besides the sense, the very expression “vi manente” is here previously used by our author in the very same meaning and relation.

NOTE.—“Sit primus indemonstrabilis A de omni B etc.] Sic restituunt hunc locum codices Carnotenses ambo, nisi quod secundus in hoc a primo discrepat, quod pro littera C, ubique ponat litteram F, quod nihil mutat in sensu. Vulgati omnes monstruose habent:—‘sit primus Demonstrabilis: secundus talis A de omni B, et abde, omnis igitur de, omnis incipiunt A, Declaratæ, atque ideo et a secunda propositione hic ad ea Modum secundum *has preteritas* retro talis est, omne F B: omne B A: omne igitur F B.’ FLORIDUS.—In MS. Petaviano: ‘A de omni B, et B de omni F. igitur de omni F, inferunt A declarata, atque ideo et a secunda propositione hic adeo est modus secundus: *hos si preteritas* retro talis est.’ Codex Leidensis a vulgato nihil discrepat. Woverius edidit: ‘a secunda propositione ad modum secundum *si has reteritas* retro;’ quod partim a Lipsio habet, qui pro ‘*preteritas*’ coniecit ‘*reteritas*.’ OUDENORPUS.—Editiones Vulcanii prior et Bipontina,—‘sit primus.’ BOSSCHA.”

EMENDED TEXT.—“ - - ; ut etiam *Peripateticorum* more, per literas, ordine propositionum et partium commutato sed vi manente, sit primus indemonstrabilis secundum *hos, talis*:—‘A de omni B &c. - - - - Hic adeo modus, secundum *hosce protensus* retro, talis est: - - -”

The first emendation is "*Peripateticorum*" for "*hypotheticorum*" or "*Hypotheticorum*."—Now, who ever heard of the Hypothetics, as a class, sect, or school? But this is evidently required, for they are opposed to the *Stoics*.—Nor can there possibly be meant any Logicians who dealt in Hypotheticals, for the examples of reasoning here given as theirs, are exclusively categorical; whereas those given as of the *Stoics* are *hypothetical*. In point of fact, hypothetical syllogisms could not be thus enounced.—Far less, therefore, can there be intended such syllogisms themselves; to these the expressions "more" and "*secundum hos*" would also be applicable.—Further, we can easily conceive how *Peripateticorum* was corrupted into *Hypotheticorum*; for in the latter half, the words are absolutely identical, and in the former, the constituent letters are either the same, or such as might naturally be interchanged.—But what here consummates the certainty is, that the mode of syllogistic enouncement declared to be "more" is precisely that of the *Peripatetics*—precisely that of Aristotle; while, on the syllogistic differences of Aristotle, Theophrastus, Aristotle and "*other Peripatetics*," there actually commences in the sentence immediately following an elaborate discussion.

The second emendation is "*fit*" for "*sit*." These words, as of old written, were hardly distinguishable, and therefore constantly confounded by the copyists; indeed as Bosscha, Oudenorp's continuator, observes, this reading is already that of at least two of the editions.

The third emendation is "*secundum hos* (or *eos*) *talis*." In reference to this: 1°, there is a strong presumption against simply throwing out, as Oudenorp has done, "*secundus talis*," which stands in all the editions, and in all or almost all the manuscripts. In itself, it may have no meaning, but still we must presume it the deformed remains of an originally significant expression. But 2°, "*secundus talis*" could lightly be corrupted from "*secundum hos, talis*," as every one at all versed in paleography is aware. Nay 3°, the clause (and this itself, in fact, soon afterwards occurs,) was here required; for the mood given, as "*primus indemonstrabilis*" (Barbara), was only arbitrarily first,—only first in the *Peripatetic* order.

The fourth emendation is "*hosce*." The Petavian MS. has "*hos si*"; and even the sense requires this emphasis to the second "*hos*."

The fifth emendation, "*protensus*," is not less certain. "*Protendere*" and "*protensio*" are the literal translations of *περτίνω* and *περτάσις*, and the translations of Apuleius himself, who professes to render "*verbum e verbo tum protensionem, tum,*" &c. He also not unfrequently employs the verb; always in a corresponding signification, and sometimes even in conjunction with the same words: "*Licet autem, eadem vi manente, utramvis partem in plura verba protendere.*"—I also punctuate after "*retro*."—So much for emendation.

Reverting now to the matter: by "*declarans*" is meant the predicate of the conclusion; and we also see, that (besides the "*ordine commutato*," and "*retro*,") the Major Proposition is called by Apuleius the "*secunda*,"—the second, to wit, according to the order of enouncement then usual among the Latins, (usual then and ever afterwards among the Greeks, &c.) as could be shown by "a cloud of witnesses" apart from our author himself. The mistake on this point is, as I have said, as universal as it is important; and so far from the present treatise being, on this and other accounts, "*nullius in re pretū*," as asserted by Waitz, it ought,—even on this and other accounts, to be prized as a precious monument of the ante-Boëthian logic of the west. Were there now, in fact, an adequate interest in such studies, a collection, critically revised, of the brief and scattered logical discussions of Apuleius, Martianus Capella, Cassiodorus, Isidorus, &c. would, even to the exclusion of the more voluminous treatises of Boëthius, be of no inconsiderable value.

But, Apuleius, in the previous quotation, speaks of a mood as "*indemonstrabilis*;" and I shall adduce the important passage in which he explains his meaning of that term, and how it is by him exclusively applied to the four (direct) Moods of the First Figure,—as this is at once corrupt, and may most certainly be emended.

TEXT.—"Ex hisce igitur in prima formula modis novem, primi quatuor indemonstrabiles nominantur: non quod demonstrari nequeant, *ut universitas maris, quæ demonstrabilis non est, et ut circuli quadratura*; sed quod tam simplices tamque manifesti sunt, ut demonstratione non egeant."

NOTE.—"Ut universitas maris, quæ demonstrabilis non est, et ut circuli quadratura.]—Hæc vulgo valde corrupta aptiori sententiæ restitimus.

WOWERIUS.—Locus non omni ex parte sanus, ut arbitror. MSS. Carnotenses obscurius habent: '*universi maris æstimat quod non demonstrantur, sicut circ. q.*' MS. secundus habet supra vocabulum '*maris*' has literas '*p. p. nom.*' quasi innuat '*maris*' esse nomen proprium. Quid si non '*universi maris*,' sed '*universim Arist.*' (hoc est Aristoteles) æstimat, etc.? FLORIDUS.—Wowerium secutus est Scriverius, cum in MSS. Nansiano et Leidensi atq̃ue Editionibus prioribus sit: '*ut universitas maris est, quod non demonstrabile non sit, et ut circ. q.*' In MS. Petaviano [which is described as codex optimus]: '*ut universi maris estum, aut quod nondum demonstratum ei sit, ut circ. q.*' Recte Floridus censuit latere sub his nomen proprium. Verum non videntur librarii tam notum Aristotelis nomen corrupturi fuisse, qui consulendus in *Περὶ Ἑρμηνείας*, an ibi quid habeat, de quo ait Apuleius. Alioquin mallem propius ad ductum litterarum '*ut universim Arist. æstimat, aut quod nondum demonstratum ei sit, ut circ. q.*' Arist. philosophus est Peripateticus Alexandrinus, cujus meminit, &c. &c. - - - OUDENORPIUS."

EMENDED TEXT.—" - - - ; non, quod demonstrari nequeant, (*ut universi maris æstus*), aut quod nondum demonstrati sint, (*ut circuli quadratura*); sed - - - "

Here, the emendation, but for the blundering of the critics, might seem even predetermined by the meaning required; it is even almost obtruded on us, in the corrupt lections of the manuscripts. The quadrature of the circle was suggested by Aristotle, (Categ. vii. § 19.) ; and the universality of the tides, probably by another passage, to which, in my present distance from books, I cannot articulately refer. But what is curious: of the two examples here given, the one, of what is *absolutely* indemonstrable, has afterwards been actually demonstrated, both in fact and in theory; whereas the other, of what is only *not yet* demonstrated, remains, as "*nondum*" then, "*nondum*" now.

The preceding are fair samples of the corruption of the text, and of the blindness of the critics. But these—the last especially—I may notice in conclusion, are still more obtrusively manifested in the last word of the sentence immediately preceding—"Formula *Quarta*" for "*Tertia*." The latter affords the meaning necessarily determined by the context, as that *alone possible*; and it is the reading given by the best manuscripts and the best edition; while there was no *Fourth* Figure known in the age of Apuleius,—far less was such Figure recognised by him. All this notwithstanding, the reading "*Tertia*" is at once obelised by Oudenorp's summary—"sed male."



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